조선우표

AUTOMOBILES MADE IN NORTH KOREA

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China Motor Vehicle Documentation Centre, 2006

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Explanation

Writing about automotive vehicles in North Korea, or the Democratic Republic of Korea (DPRK) as the country calls itself, was writing about the unknown. Nevertheless, we were arrogant enough to make the attempt.
We have never visited North Korea. We can't speak or read Korean.

The question rises, where did we get the information. We have gathered, frantically, everything we could find about the North Korean automotive industry. Since 1972. Starting by looking in magazines printed in the DPRK, in the 1950s, 1960s, 1970s, 1980s and 1990s. By visiting in the 1980s East German (DDR) automotive publishers. By researching East European and Soviet car magazines, also since the 1970s. And, of course since the late 1990s by surfing attentively over the internet. Then, finally, we discovered something we had totally missed: the Koreans have printed a lot of information about their automotive industry on stamps! Literally, by the emission of a number of truck and bus stamp series during the last 40 years. Luckily enough, we could include this information too!

Why didn't we take a plane and go to the country itself? The reason is simple, it wouldn't have yielded any result. Information about this industry is not given to foreigners. A tourist in the country is forbidden to take pictures from vehicles, except with authorisation of the guide. No guide would authorize photographing the abandoned trucks or buses ripe for the scrap yard.
Still, we have pictures taken by tourists. Not all tourists have been stopped from taking a picture of one bus or motor car. When studying the internet pages with the personal reports of individual DPRK travels, you will easily find out that the trips are standardised, and so are the photos. In the automotive field: one regular photo of the streets of Pyongyang, one of a Pyongyang trolleybus. But look, when every fellow traveller makes one trolleybus photo, than we have pictures enough to distinguish different trolleybus models and manufacturers.
A second reason why our trolleybus section is extended, are the reports written by **Sergei Tarkhov** and **Dmitriy Merzlov** in the Trolleybus Magazine. These were based on superb research.

We hope to go to North Korea at some time. When the country opens, when we can meet the people in the factories, the workers, the designers. When we can travel freely in the cities and country sites and take pictures of whatever we want. Just have we have gotten used to doing in china since 1983. Only then we can complete this book, as it is now only a beginning.

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Language

One of the difficulties we had to face is the romanisation of the Korean (Hangul) names and characters.

In the first place, the South Koreans have chosen a standard system which is different from the system in the North.
To give some examples:
Seungri in South Korean is Sungri in North Korean, Pyeongyang in South Korean is Pyongyang in North Korean.

A second complication is that the North is not consistent in the use of their system.
An example: in publications the North Koreans use many ways to write the name of the locally assembled Fiat Siena: Hwiparam, Hwipharam, Fiparam, Hviparam, Hweepaaram.

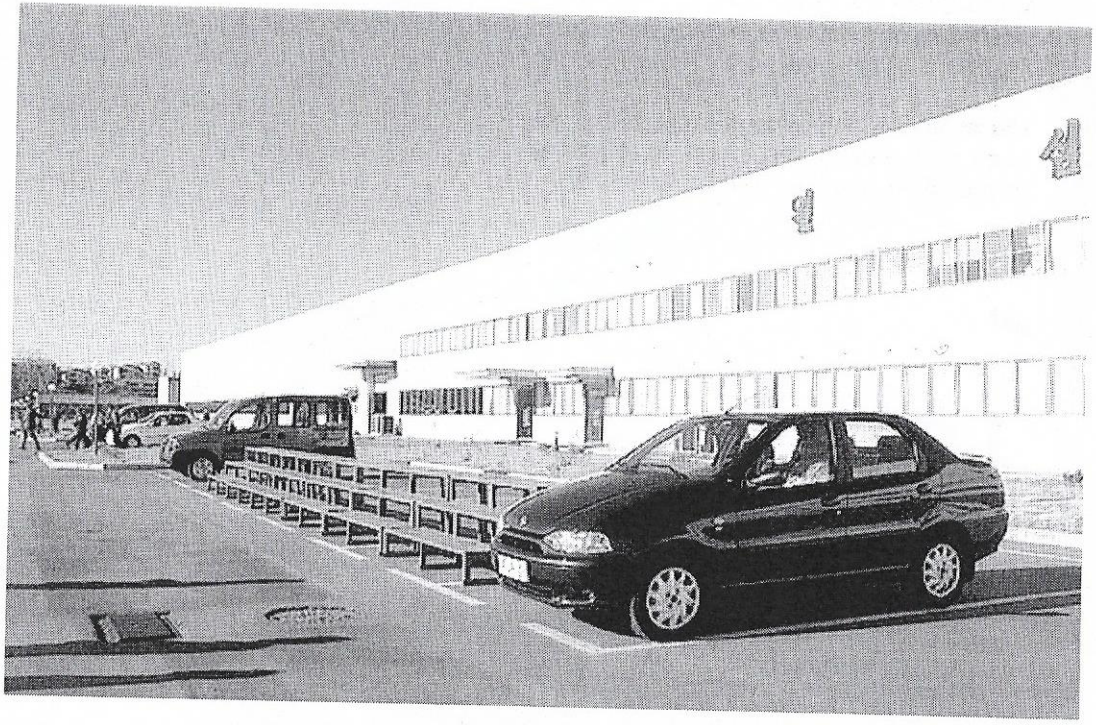
After discussions, we have decided to choose the official Northern system. When other romanisations are also in use, we present them too.

Names

The names used for the vehicles are mostly standard Korean revolutionary concepts. They are common in the North Korea society and ideology. Some names are used by different factories for different products. For instance Chonyonjunwi (Youths' Vanguard), used for buses made in Pyongyang and Chongjin.

The other revolutionary names in use are: Chollima (Flying Horse or Pegasus), Chongnyon (Youth), Jaju (Independence), Jipsan (Gathering and Distribution), Kaengsaeng (Self Reliance), Konsor (Construction), Sungri (Victory).

Another group of names are the geographical ones: Kumsusan (Mt. Kumsu), Paektusan (Mt. Paikdu),Pyongyang, Sungrisan (Mt. Victory), Taepaeksan (Mt. Taebaek)



TRUCKS MADE BY THE SUNGRI GENERAL AUTO WORKS

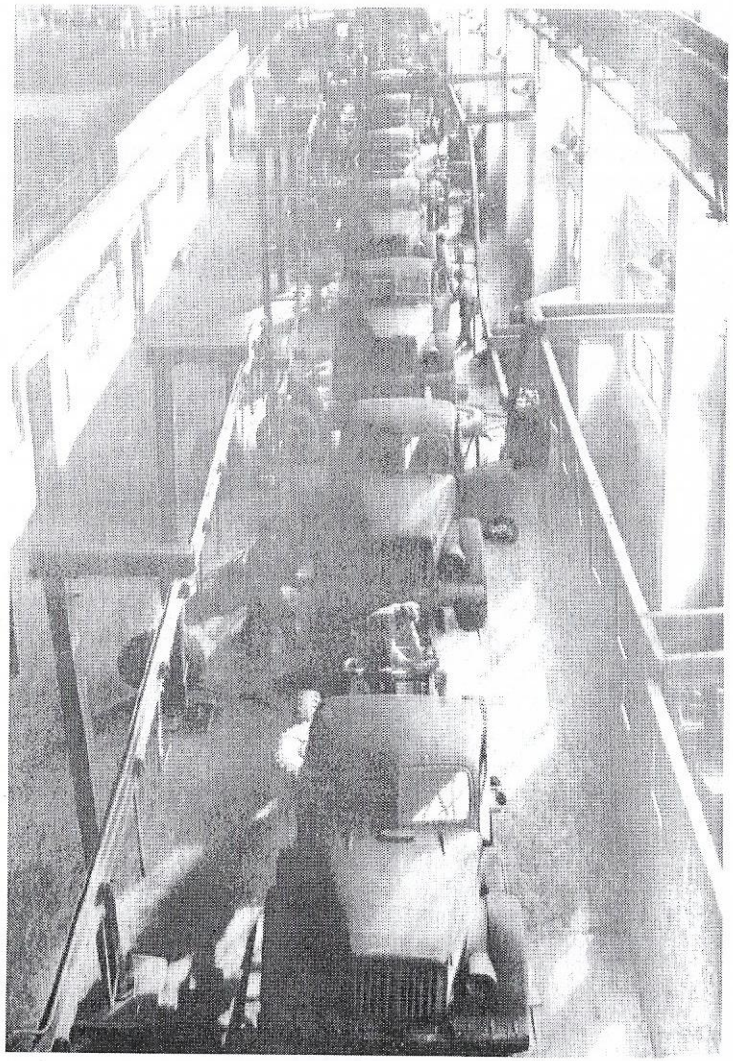
Construction of this plant started in 1950. In 1958 the automobile production started, under the name of Tokchon Auto Works. The factory is established in Tokchon, South (Namda) Pyongan Province. In 1975 its name changed to Sungri Auto Works.
From 1958, Sungri trucks were produced. In 1961, a cross country vehicle was trial produced. In 1964 a 10 ton dumper series, which name was later changed into Jaju. In 1970 a 25 ton dumper named Sungrisan, later renamed Konsor. A 40 ton Kumsusan dumper was introduced in 1979. Chungsong and Chollima buses were also made in this factory.

The factory probably belongs to the Ministry of Metal and Machine-Building Industries.

Car assembly and parts manufacturing has been done here. In fact, most vehicle parts except glass and tires are produced here.

Sungri truck production

Exposition of Sungri products in 1985



The factory also produced other trucks, buses and vehicles for transporting and launching missiles.

In the 1980s the plant had an annual capacity of 20.000 vehicles. Later production declined to around 6000~7000 vehicles per year.
In 1996, when the economic woes climaxed, the annual production turned out a mere 150 units.
In 1999, 7300 units were produced.

The factory site is 250.000 m2, there are 11.000 workers.

The Sungri General Motor Works is said to be unable to produce lorries on a regular basis at present because of an inadequate supply of malleable cast iron. The factory must take measures to manufacture malleable cast iron by its own efforts, so as to produce lorries on a steady basis as soon as possible.
Kim Il Sung, September 30, 1971

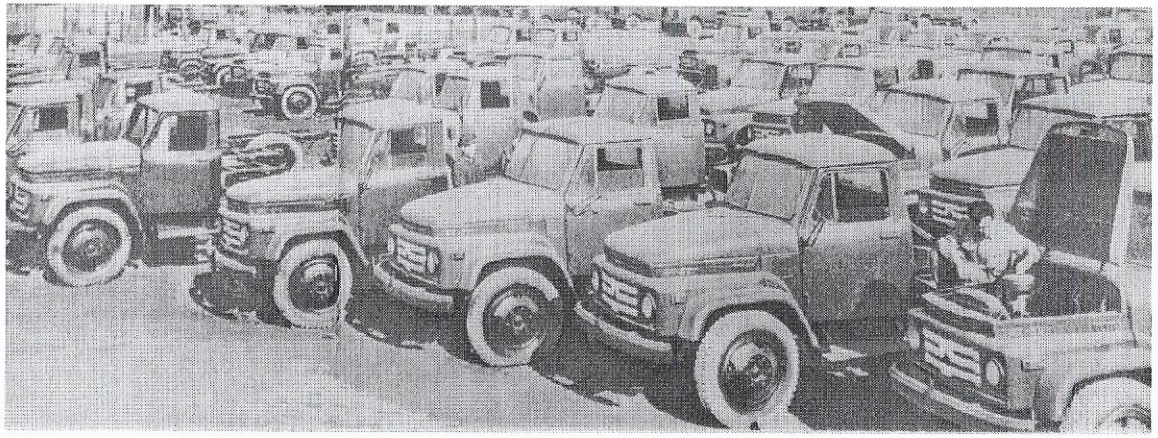
KIM JONG IL VISITS MOTOR WORKS AND MACHINERY PLANT, DECEMBER 17, 1998.

*Kim Jong Il, General Secretary of the Workers' Party of Korea (WPK), visited the **Sungri General Motor Works** and the Toksong Machinery Plant on a guidance mission on Thursday. The Chairman of the DPRK National Defence Commission was accompanied by the Chief Secretary of the South Phyongan Provincial Committee of the WPK Ri Kil Song, secretaries Kim Kuk Thae and Kim Ki Nam and members and first vice department directors Pak Song Bong and Ri Yong Chol of the WPK Central Committee.*

He went to the Sungri General Motor Works. He first looked round a monument to the on-site instructions of President Kim Il Sung erected at the entrance to the works and the Sungrisan Revolutionary Museum. He said the President's clairvoyant wisdom and wise leadership opened a new history of the automobile industry in Korea and gave birth to the powerful automobile producer at the foot of Mt. Sungri, a historic site.
He then went to the foundry, the engine plant and other production processes to learn about the production and management of the works.
He met with workers and technicians and warmly encouraged them. He noted with great satisfaction that the workers of the motor works were staunchly advancing toward the bright future, full of confidence and optimism, displaying the heroic stamina of the Korean working class in today's forced march.
He highly appreciated their achievements in producing numerous automobiles of various types needed for various domains of the national economy.
The production potentials of the motor works, one of the great creations of self-reliance, are great indeed, he said, adding that the powerful industrial establishments built in different parts of the country are a clear demonstration of the validity and great vitality of the party's line of building an independent national economy and are a valuable foundation for rapid progress in the building of a powerful and prosperous state.
He said the motor works holds a very important position. He set the works immediate objectives and called for producing larger quantities of better automobiles of various types suitable for the topographical conditions of the country. He expressed great satisfaction with the revolutionary culture established by the workers of the works in production and life. He urged the leading officials of the works to provide the workers with full conditions for production and pay deep attention to supply services for them, as required by the Taean work system.
He said if the party members and other working people of the works fight the way they fulfilled the task of producing 10,000 automobiles some 20 years ago, they can successfully fulfil the current task. He ardently called on the workers of the motor works to play the vanguard role in carrying out the instructions of the President and to take the lead in building a rich and powerful state.

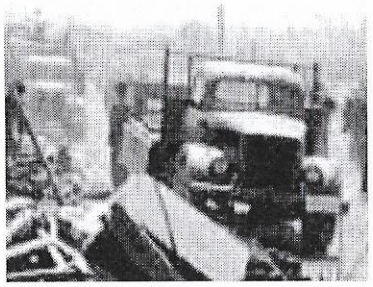
He then went to the Toksong Machinery Plant. He looked round the machine processing workshop and other production processes to learn about production. "Once we are determined, we manufacture any machine without fail because we have a powerful self-reliant industry," he said, looking at the powerful production bases of the plant equipped with modern machines and facilities. " "We are highly proud of our powerful heavy industry the core of which is the machine-building industry our people built, tightening their belts." He gave the plant important tasks in the belief that the workers of the plant would bring about a great upswing in production in the future, too.

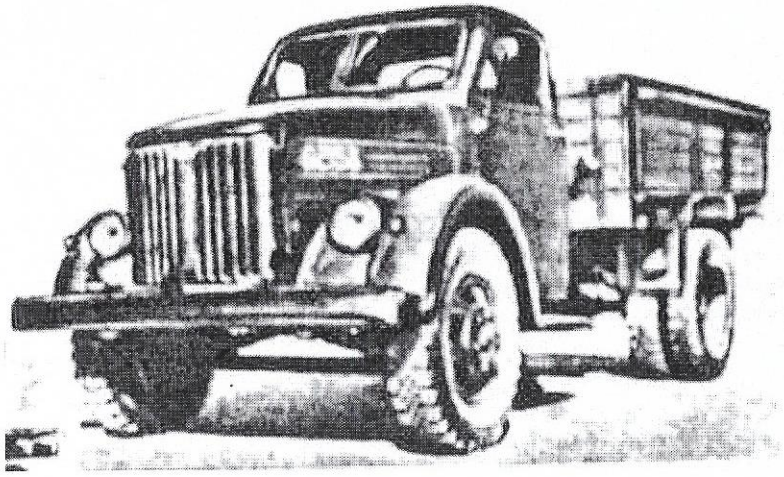
KCNA, December 20, 1998.



SUNGRI 58

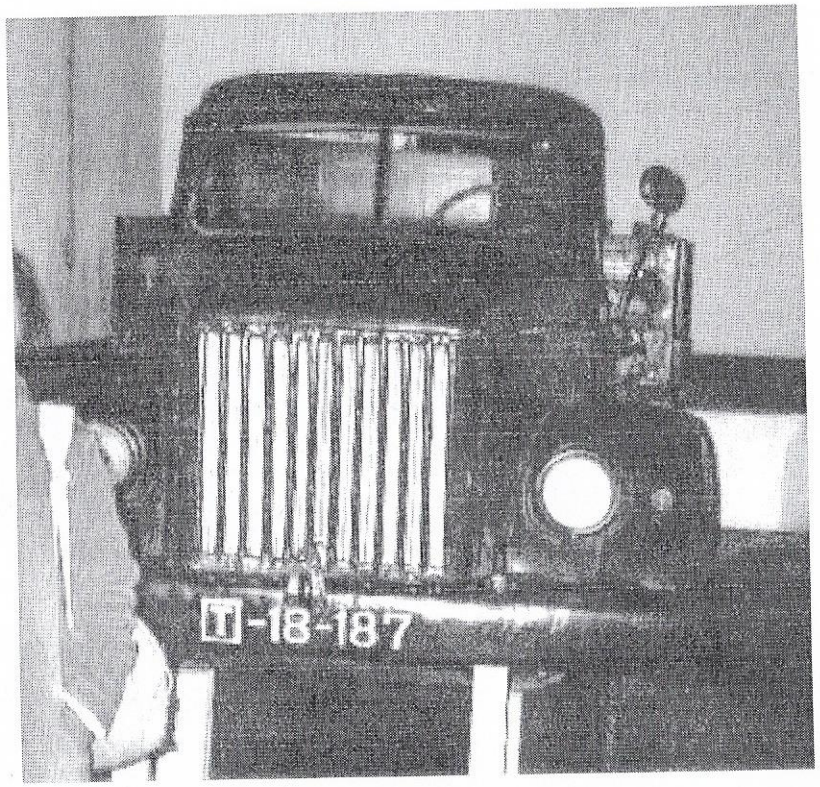
Introduced in November 1958. And, according the factory, made in only 40 days. This 2½ ton truck was based on the Russian GAZ 51 design. Sungri is translated in English as: **"Victory"**.
It is also romanised as 'Synri' or 'Sungli'.
The engine was equal to the Russian one: a side valve, 6-cylinder, petrol engine, 70 hp/ 2800 rpm. The maximum speed of the truck was 70 km/h.
Its primitive but robust design was quite suitable for the post-war conditions of Korea. The mass production of these vehicles was a major achievement, aided by Czecho-Slovakian input.
The vehicle was hard to start, and the crudely copied carburettor, used since 1961, wasted gasoline badly at low speeds, accounting for the usually high fuel consumption.



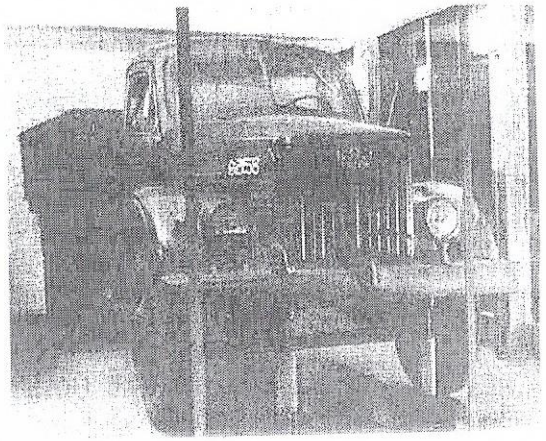


stamp of firetruck, 2001

First Sungri 58, made in November 1958



Left: Sungri 58, one the early models, now in a museum. Right: the first Sungri 58.

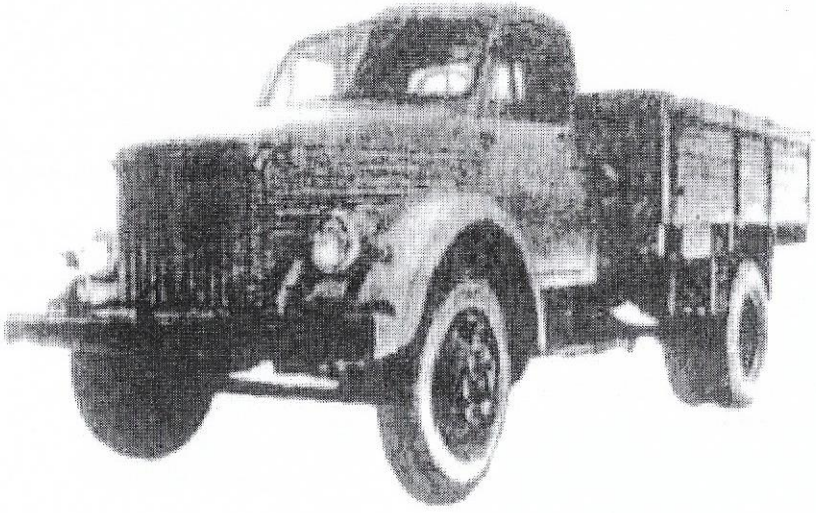


The Sungri Automobile Combine is sharply increasing the production of trucks under the revolutionary slogan: 'Let's meet the requirements of Juche in ideology, technology and culture! Ko Dong Un, Korea Today, 1977 no. 5.
(Juche = ideology of self-reliance and self-independence)

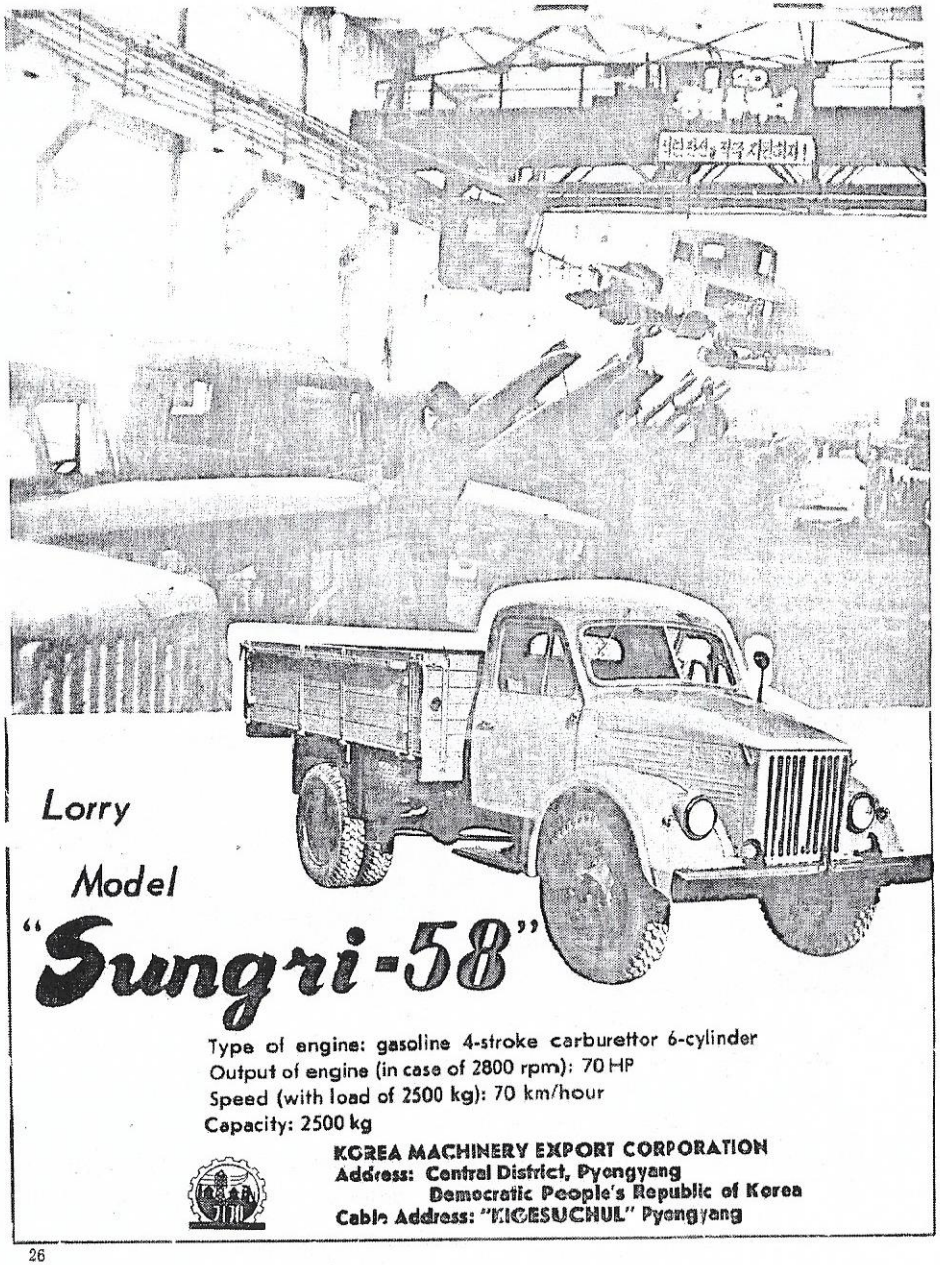
Two Sungri 58, including a box van, followed by two Kaengsaeng 69 and again by two Sungri 58 in Pyongyang.

Sungri 58	4 x 2
Payload	2 ton
Kerb weight	2710 kg
Loaded weight (road)	5360 kg
Loaded weight (cross country)	4710 kg
Number of cylinders	6 (petrol engine)
Capacity	3480 cc
Maximum output	51.5 kW/ 2800 rpm
Length	5525 mm
Width	2200 mm
Height	2130 mm
Wheelbase	3300 mm
Maximum speed	70 km/h
Tyres	7.50 x 20

The Sungri 58 was basically a copy of the Soviet GAZ 51 (4x2) vehicle built to a much lower standard including weaker springs and an engine that developed less than its stated 70 hp and had much higher fuel consumption. Civilian built models had dual rear wheels and the military model single rear wheels. *Jane's 1986*



advertisement, 1973



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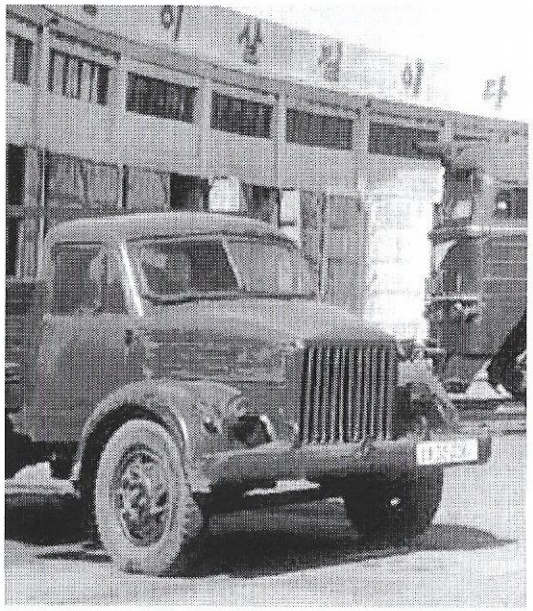
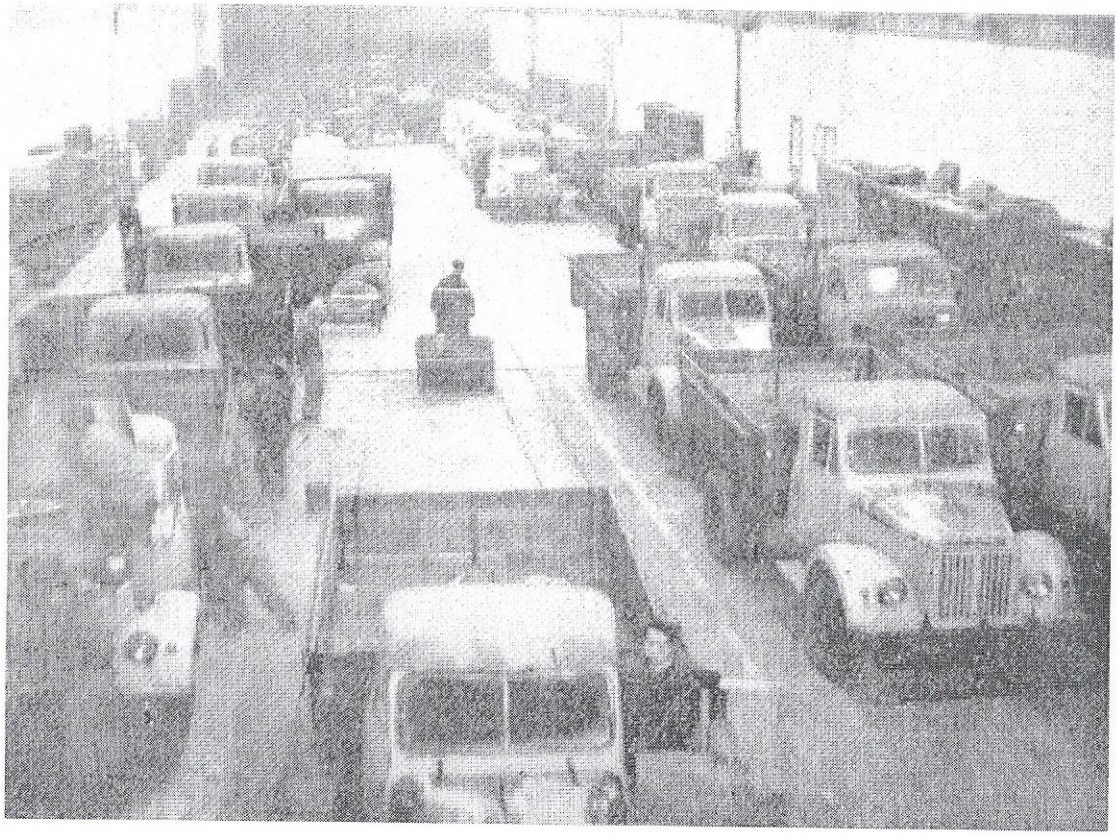
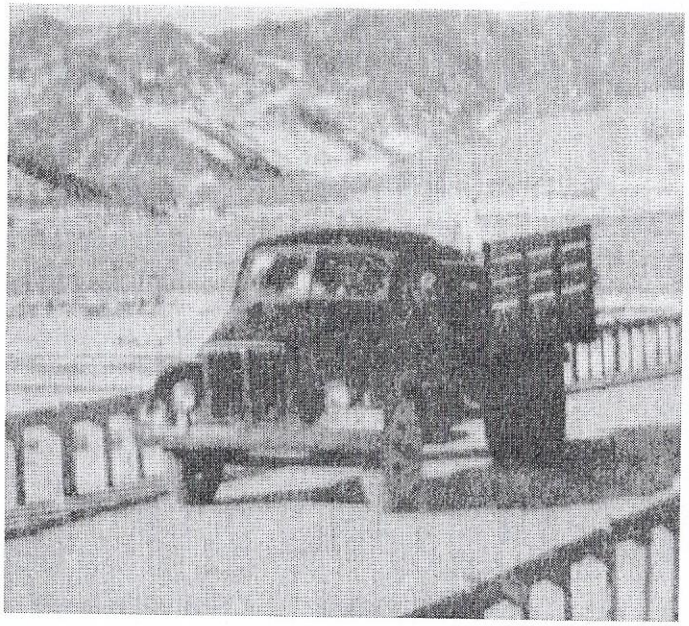
Note military blackout lamps.



There are two different grilles : the one with the five slats left and five slats right is specific for the Korean Sungri 58 model. The one with eleven equal slats is either the original Russian GAZ 51 or another Sungri variant.



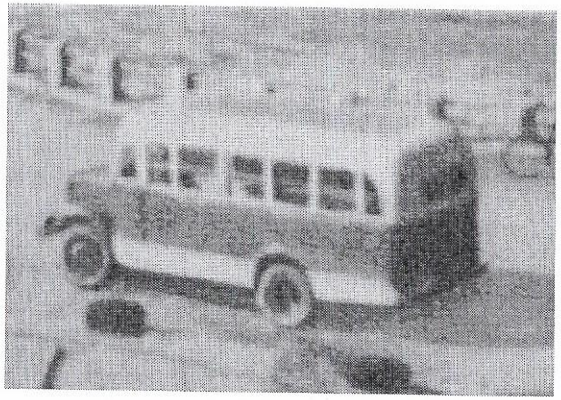
Factory production hall, 1961

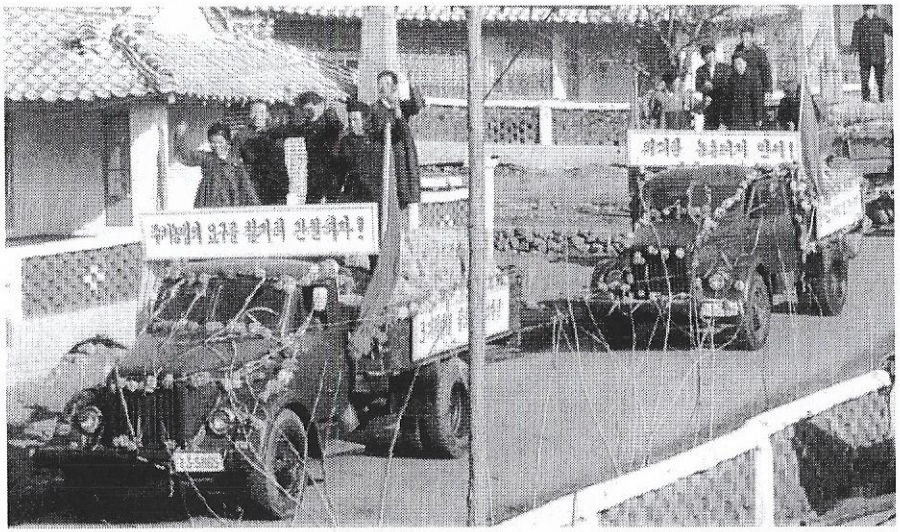


In the country site.

In stock.

Bus conversion

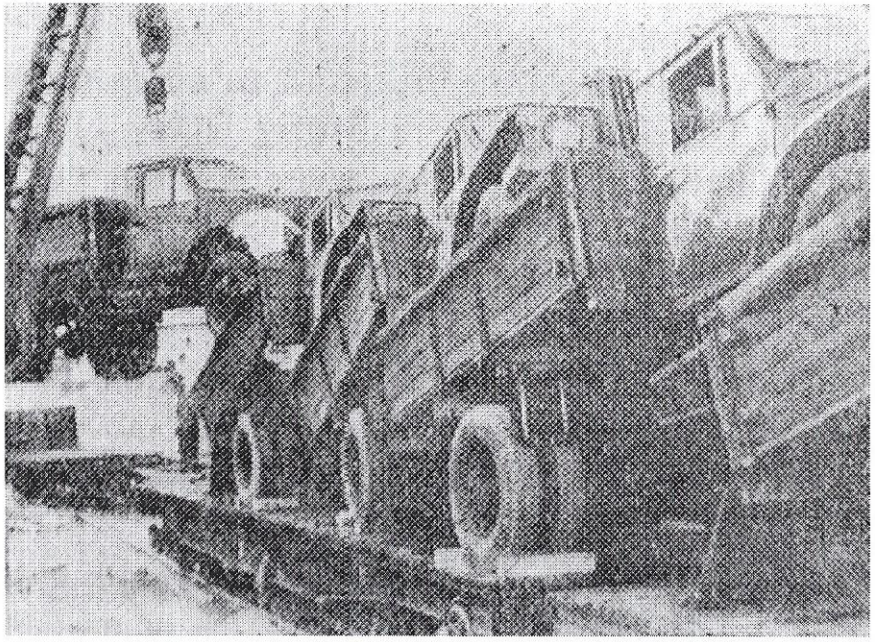


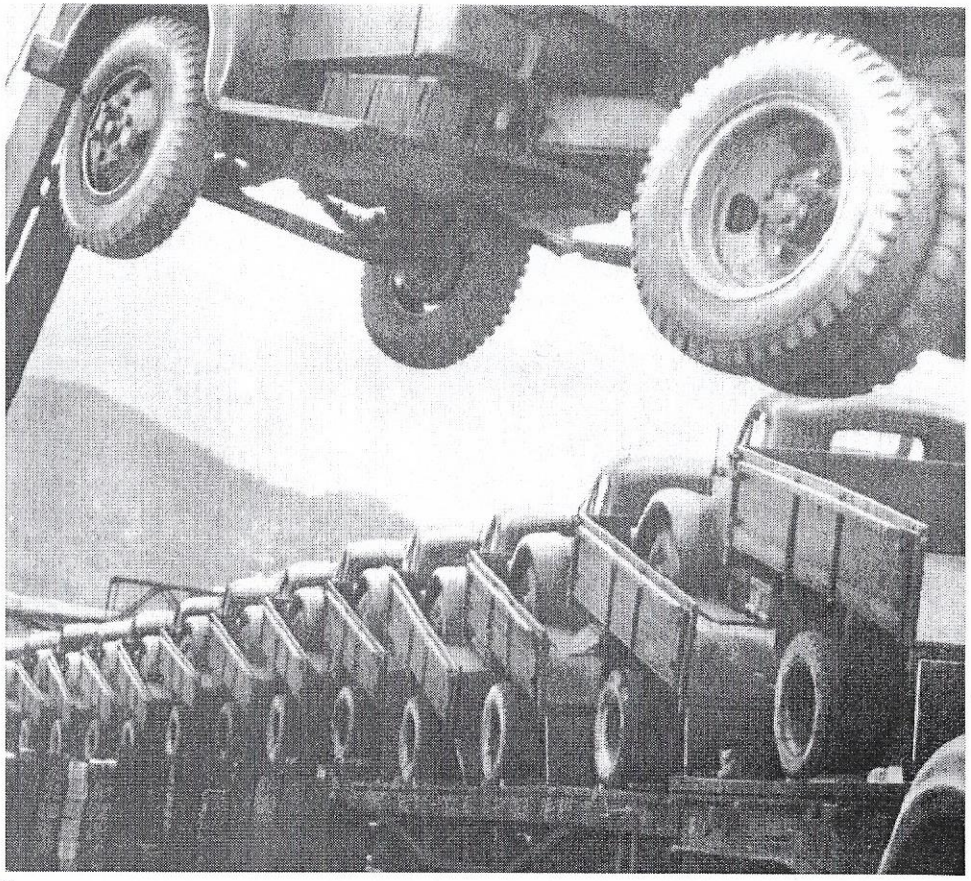


In the 1970s, for several years North Korea celebrated bumper harvests.

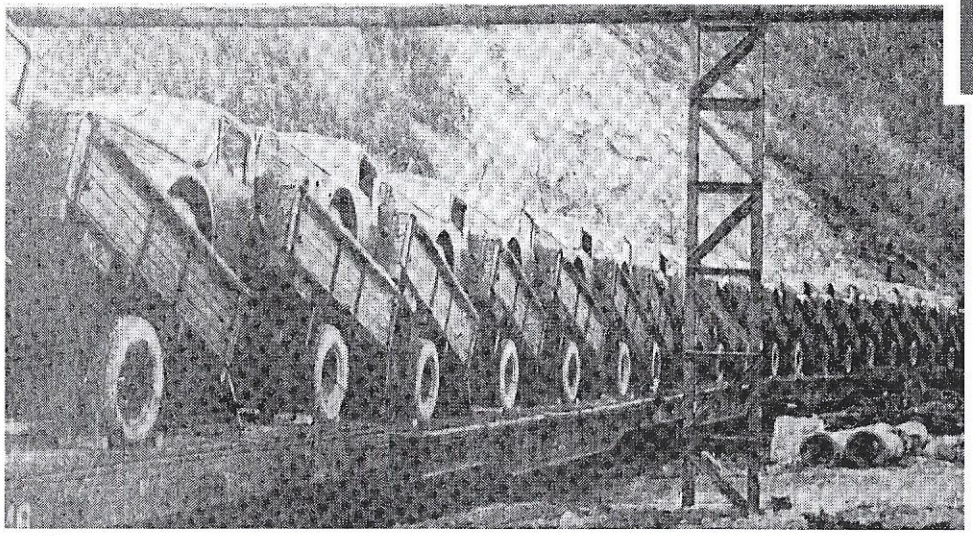
Riding in the first lorry for Pyongyang where the Premier was, my heart beat high as never before. Seated in lorry No. 1, model Victory 58, which was, so to speak, the 'eldest son' of our factory, I said to myself: 'Ye, lorry No. 1, model Victory 58! You are at last born. Though your birthplace is Dokchon, your native place is Pyongyang. Run fast to Pyongyang, your native place, where the Party and the Premier are!

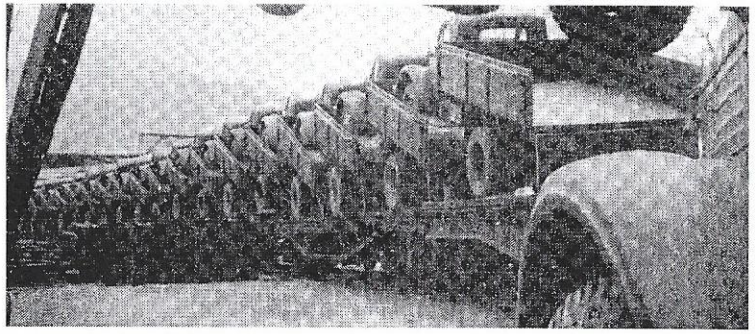
Pak Dong Kwan, Korea Today, No. 140, 1968





Transport by train.





Sungri 58 with gas generator. In the background a UAZ 469.

SUNGRI 58 WITH GAS GENERATOR

Every visitor to North Korea has seen a truck or bus equipped with a large drum-like device that emits dark smoke. These are gas-generator vehicles. They do not consume gasoline but use charcoal or wood to produce gas that is then filtered and fed into the slightly modified internal combustion engine. Those large drums are the gas generators that produce the inflammable gas.

The gas-generator car, or 'charcoal car" is not a North Korean invention. In the 1940s, when World War II led to an acute fuel shortage in Europe, many European cars were refurnished with gas-generators to run on the ever-available supply of wood. Some countries, including Germany and Russia, even briefly mass-produced vehicles specially designed to run on this exotic fuel. The gas-generator cars were also used in Japan and colonial Korea. However, such cars went out of use as soon as the war was over and normal oil supplies resumed production.

The oil problem has always been a painful issue for both Korean economies. The South and North both produce not a single drop of oil and thus rely heavily on imports. In the North, the oil used to come from the USSR and China. Because of strategic considerations, both countries charged Pyongyang so-called ``friendship prices", which were well below prices on the international market. Nevertheless, the import of oil remained a major financial burden even in the best of times.

Therefore, in 1978, it was decided to retrofit some North Korean trucks with gas generators. The first experiments were made with the Sungri 58, the main workhorse of the country's cargo transportation. The results proved successful, and in the mid-1980s, a large conversion program was launched. By the early 1990s, some 70-80 percent of the trucks and buses, including almost all vehicles in the countryside, ran on charcoal, wood and even maize stems.
This was a fortuitous decision. In the early 1990s, the friendship prices were suddenly abandoned, and former allies began to charge normal international prices. This shock was cushioned by the success of the conversion program.

However, if it is so simple to use sustainable fuel for running cars, why did all the world's automotive industry not rush to emulate the North Koreans? Alas, the gas generator is not a viable alternative to the gasoline engine, as North Koreans can testify from their own experience.
First of all, the engine is remarkably inefficient. The Sungri 58 truck is designed to move a 2.5-ton load. However, with a gas generator it cannot take more than 2 tons even under ideal conditions. The gas generator itself is heavy and wieldy (a typical generator has a volume of 180 litres). In addition, drivers often have to take some charcoal for the trip, and this bulky fuel further reduces the commercial load.

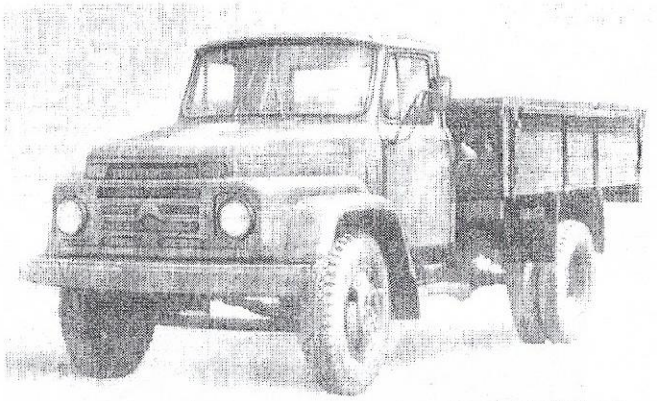
The gas generated is not as efficient as gasoline, thus the engine produces much less power. One of the results is a very low speed: 30 kilometres per hour at best. Quite often the vehicles really struggle when going uphill, a not inconsiderable problem in a country where 80% of the total area is covered by mountains.
Emission from the gas-generator vehicles is quite bad, although this is not probably seen in North Korea as a major reason to worry. Despite occasional declarations to the contrary, environmental concerns are still quite alien though, in this regard, is not so different from a majority of the world's poorer nations.
Another problem with a gas-generator car is that the motor takes a long time to warm up. Even in good weather, it takes about half an hour to warm up the gas generator. Only when it is sufficiently heated up is it able to produce enough gas for the engine. Also, North Korean gas-generator vehicles require an additional ``crew member", who is a technician that operates the gas generator when the car is moving.
The wide use of the gas-generating trucks helped North Korea stagger through the oil crisis of the early 1990s.

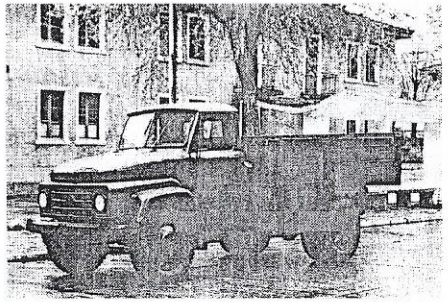
Andrei Lankov, The Korea Times, Jan. 29, 2004.

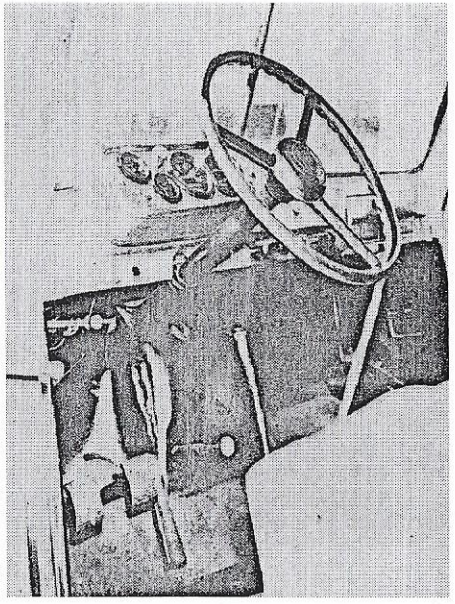
Photo taken by Oliver Barnham in Shenyang, China, August 1981.

SUNGRI 58 KA

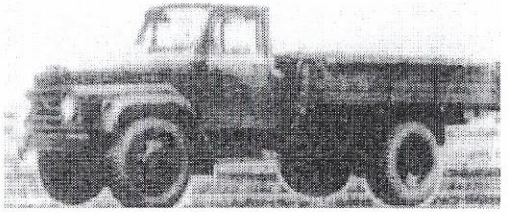
About 1979 the cab design of the vehicle was modernized.







Sungri 58 KA	4 x 2
Payload	2.5 ton
Kerb weight	2710 kg
Gross vehicle weight	5350 kg
Number of cylinders	6 (petrol engine)
Capacity	3480 cc
Maximum output	51.5 kW/ 2800 rpm
Maximum torque	201 Nm/ 1500~1700 rpm
Length	5715 mm
Width	2270 mm
Height	2080 mm
Wheelbase	3300 mm
Maximum speed	70 km/h

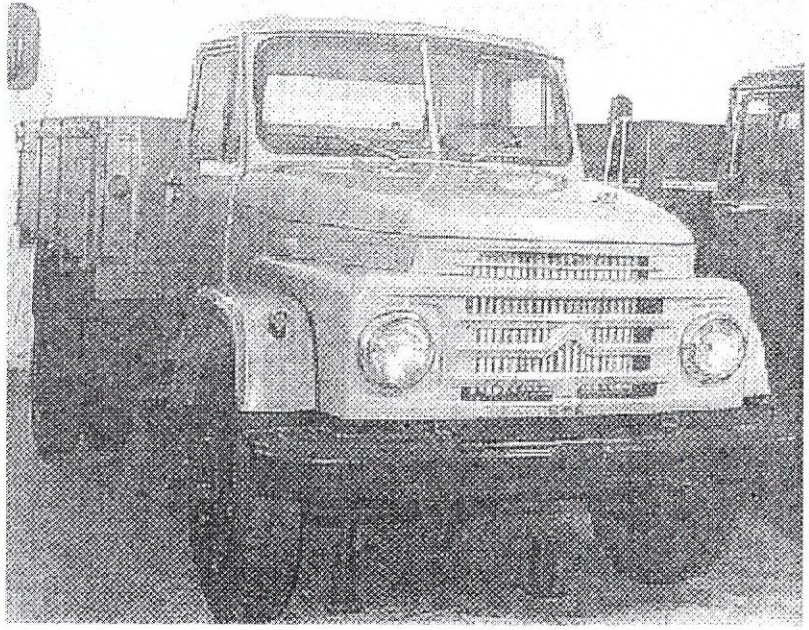


Cooling water problems.

In North Korea trucks are in use for people's transport

On the factory site.

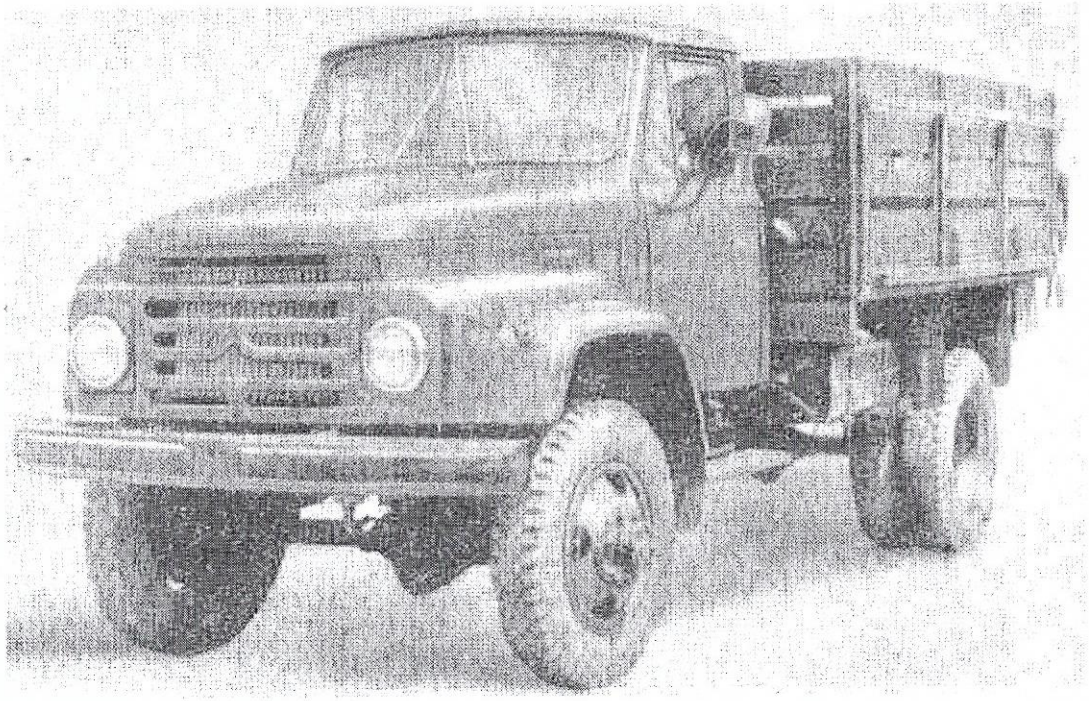
Exhibited.

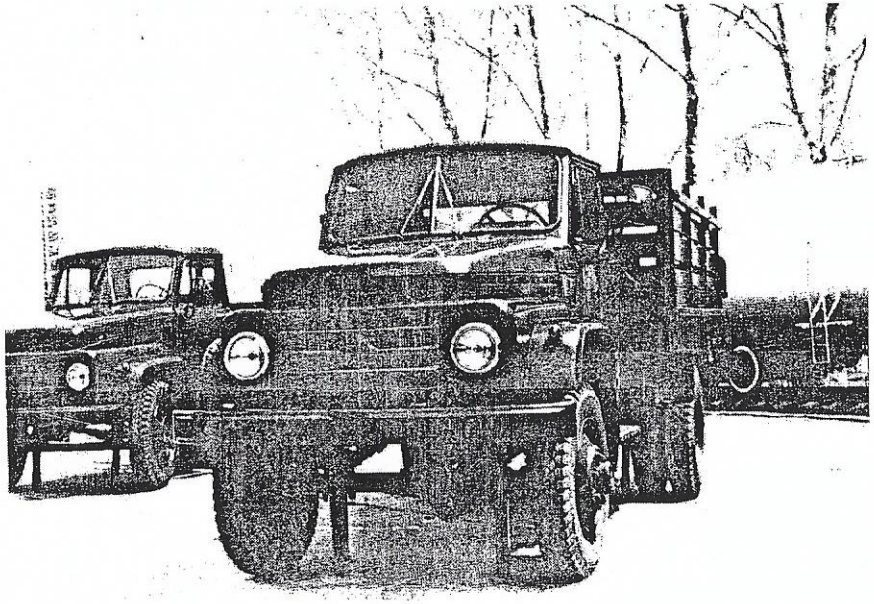


SUNGRI 61 NA

A 4 x 4 version of the 58 KA was also made in the 1970s.

Sungri 61 NA	4 x 4
Payload	2 ton
Kerb weight	3280 kg
Gross vehicle weight	5420 kg
Number of cylinders	6 (petrol engine)
Capacity	3480 cc
Maximum output	51.5 kW/ 2800 rpm
Maximum torque	201 Nm/ 1500~1700 rpm
Length	5525 mm
Width	2200 mm
Height	2280 mm
Wheelbase	3300 mm
Maximum speed	70 km/h





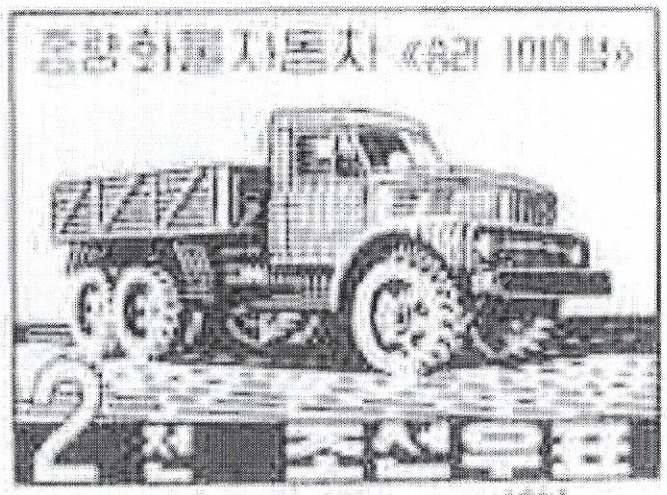
Sungri 61 NA, stamp of July 2000

SUNGRI 10.10

The Sungri 10.10 was a 6 x 6 6 ton payload truck made in July 1960.

The cab is based on the Sungri 58 cab, but the headlamps are built into the grille.

Sungri 10.10 6 ton truck, stamp of April 1961

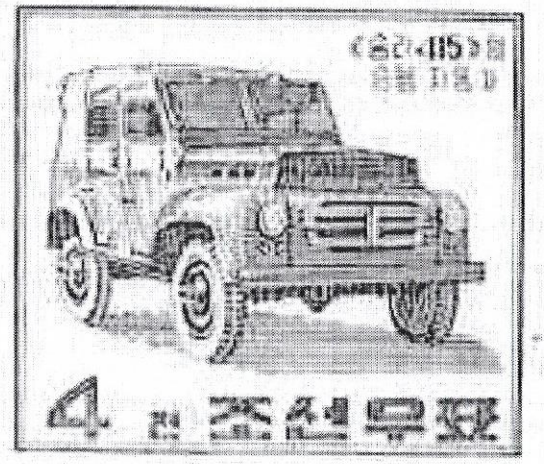


SUNGRI 4.15

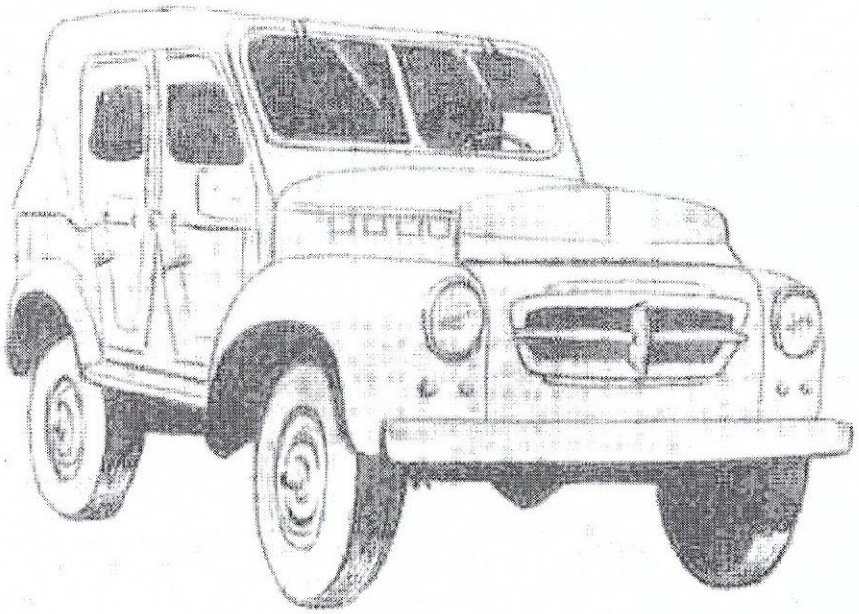
The five-seat 4.15 4 x 4 field car was introduced in April 1961. It was based on the GAZ 69A cross country vehicle, and had a restyled front end, featuring built-in head lights. It is not certain if there was any production at all.

Sometimes this car is refered to as Sungri 4.25, but we think this is a mistake.

April 15 is the birthday of Kim Il Sung.



Sungri 4.15, stamp of February 1963



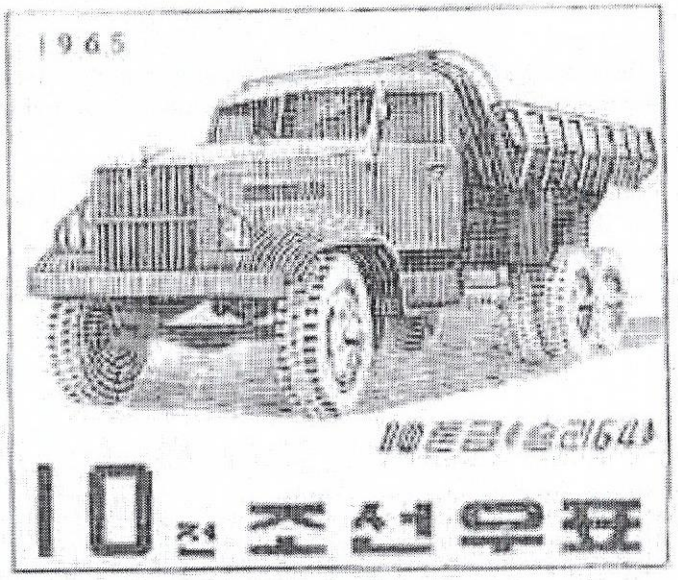
Drawing made after the stamp by the late military vehicle specialist Bart Vanderveen.

SUNGRI 64 or JAJU 64

The Sungri 64, based on the Russian Kraz 214, was a 10 ton 6 x 4 dumper.

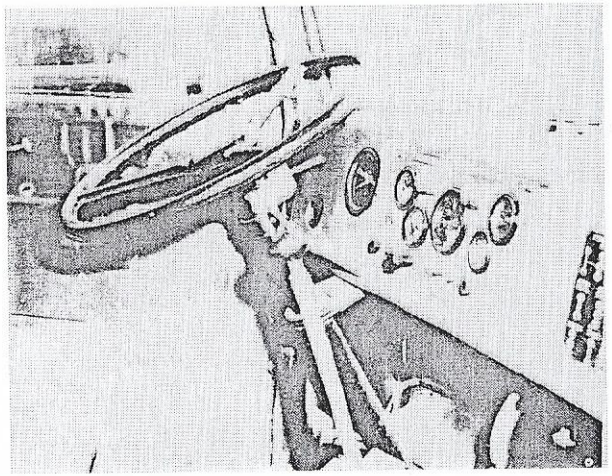
The dumper was introduced in 1964.

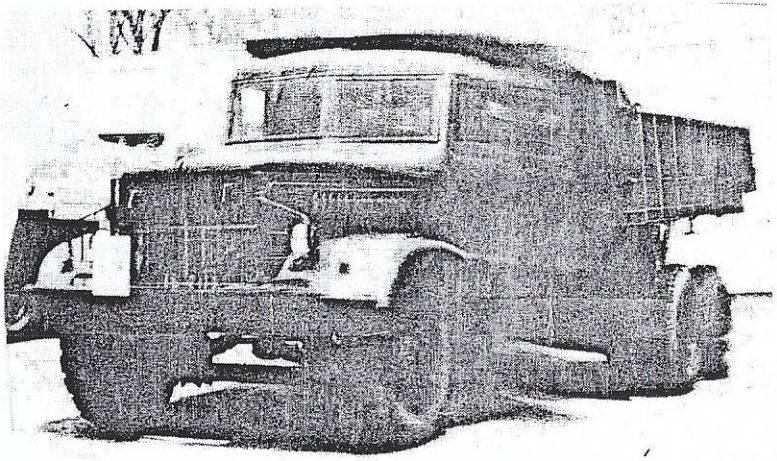
Later, the vehicle's name was changed into:
Jaju (other romanisations: 'Chaju', 'Chachzu') which means **"Independence"**.

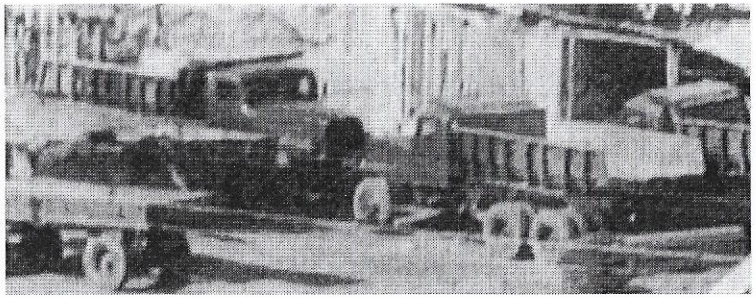


Jaju 64	6 x 4
Payload	10 ton
Kerb weight	11710 kg
Gross vehicle weight	21860 kg
Length	8200 mm
Width	2640 mm
Height	2820 mm
Wheelbase	4780 mm
Maximum speed	70 km/h

Crane truck based on Jaju 64

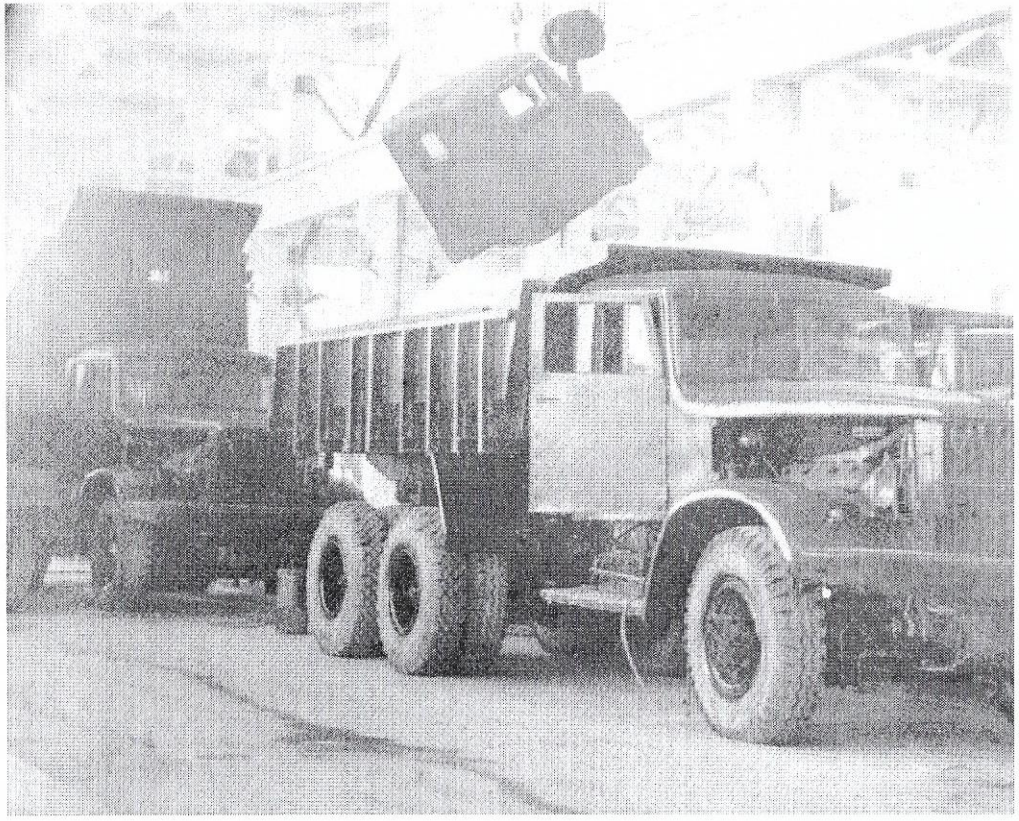


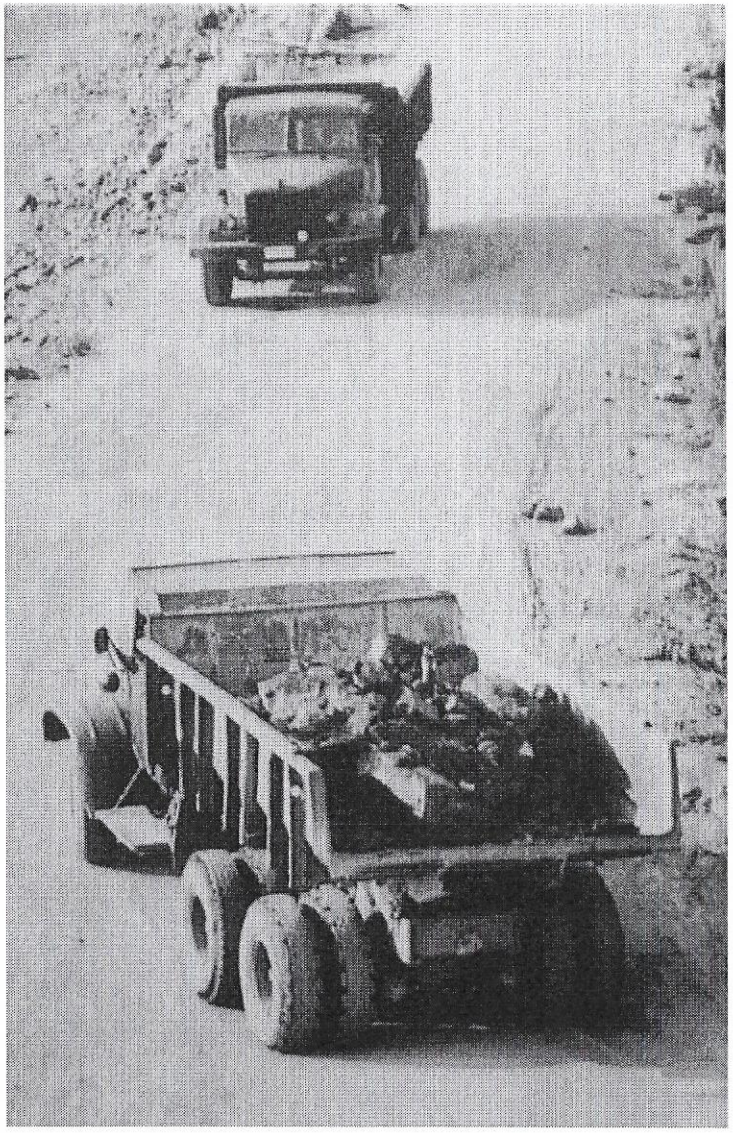




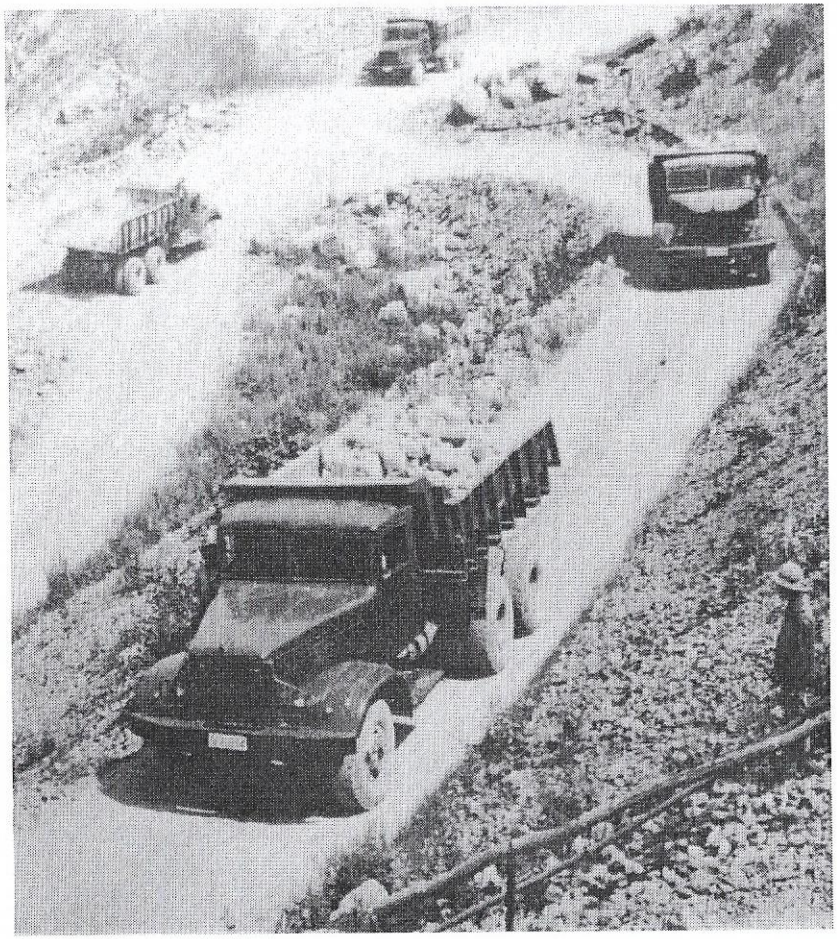
In April 1963, when the Premier paid another visit to our factory and gave us the new assignment of producing 10-ton lorries, we replied with confidence that we would carry out the assignment by our own efforts.
Pak Dong Kwan, Korea Today No. 140, 1968.

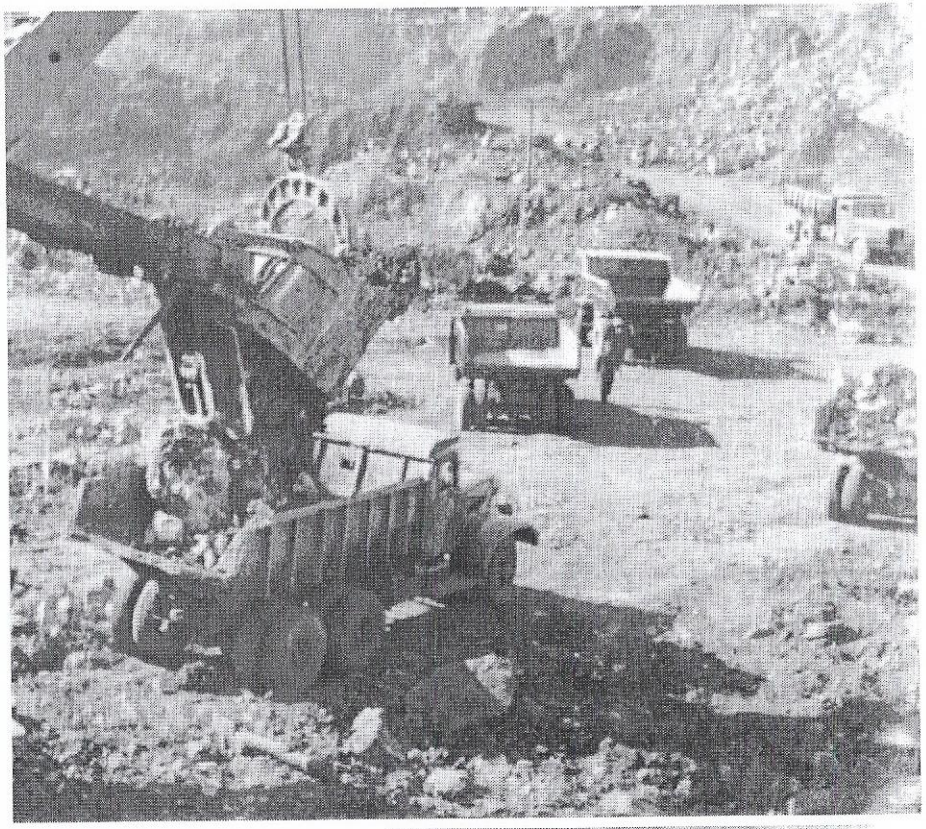
Jaju 64 production.





The Jaju 64 was extensively used in the open cast mines.





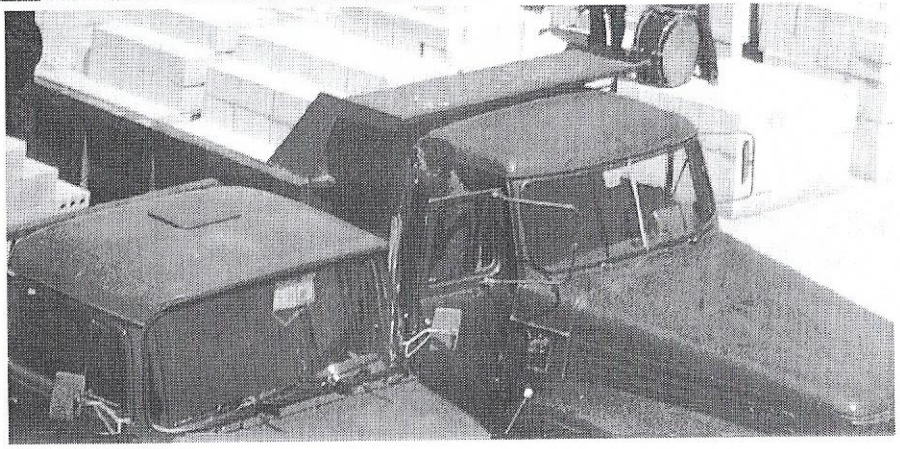
JAJU 82

The successor of the Jaju 64 was the Jaju 82. First introduced in 1982, the vehicle is sometimes also referred to as Jaju 64.

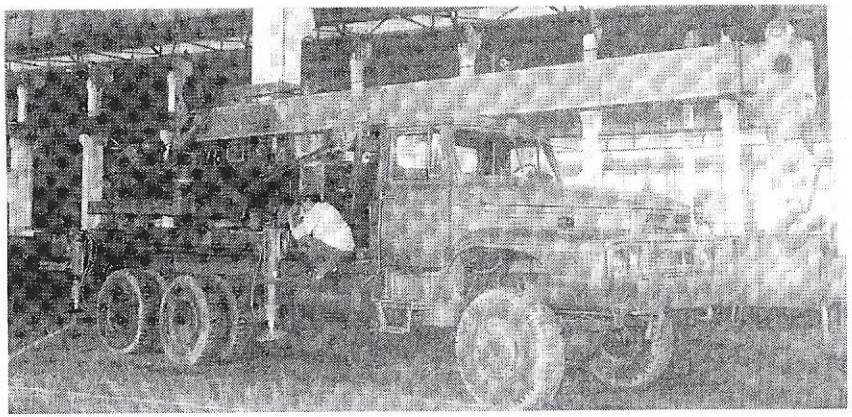
Jaju 82	4 x 2
Payload	10 ton
Kerb weight	8920 kg
Volume cargo body	7 cubic meter
Engine	8 cylinder diesel
Max.output	240 hp
Gross vehicle weight	19395 kg
Length	7455 mm
Width	2650 mm
Height	2800 mm
Wheelbase	4400 mm
Maximum speed	84- 94 km/h
Min. turning radius	9 m

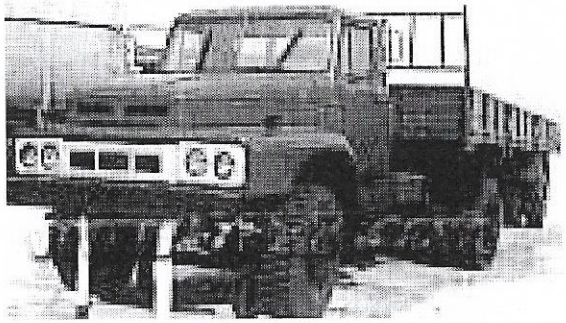
Korean advertisement in Russian

Jaju versions: dumper and concrete mill mixer.



Jaju 82 stamp, 1988.

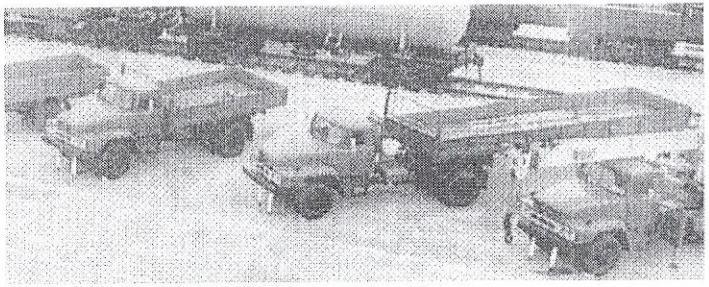




Jaju 82 4 x 2 tractor truck with trailor and 6 x 4 crane truck.

Note the two different grilles.

Several Jaju models exhibited in Pyongyang.



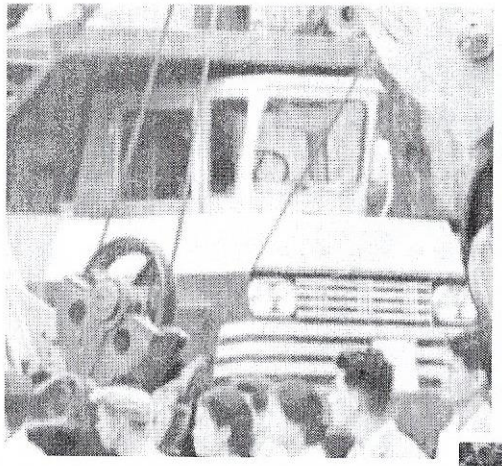
SUNGRISAN or KONSOR 25/ 27/ 30 TON

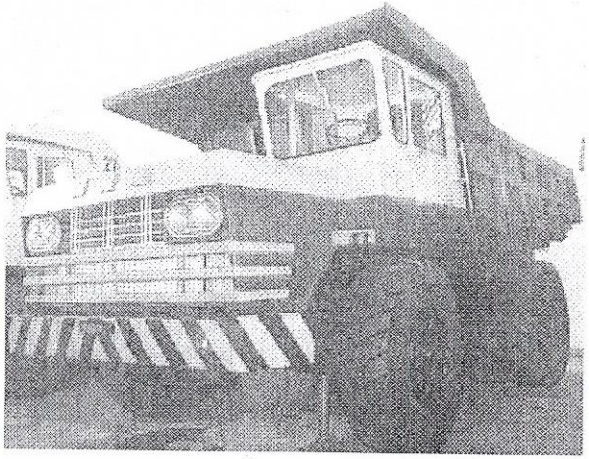
In 1970 the 25 ton 4 x 2 dumper Sungrisan (Mount Victory) was developed. Later the dumper was called Konsor. (also romanised as 'Konsol'.) Konsor means **"Construction"**.

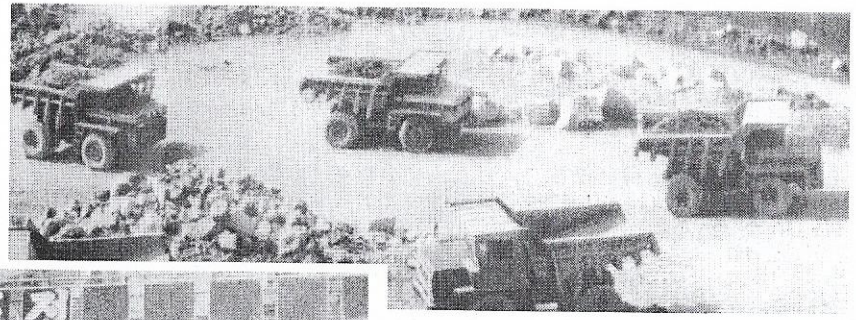
25 ton Sungrisan, stamp of November 1971

stamp of July 2000, Konsor 25 ton dumper

Konsor	4 x 2
Payload	25- 27- 30 ton
Kerb weight	21030 kg
Gross vehicle weight	46000 kg
Number of cylinders	V 12 (diesel engine)
Capacity	3480 cc
Maximum output	360 hp
Length	7200/ 7535 mm
Width	3450 mm
Height	3495 mm
Wheelbase	3550 mm
Maximum speed	55 km/h
Min. turning radius	8.7 m







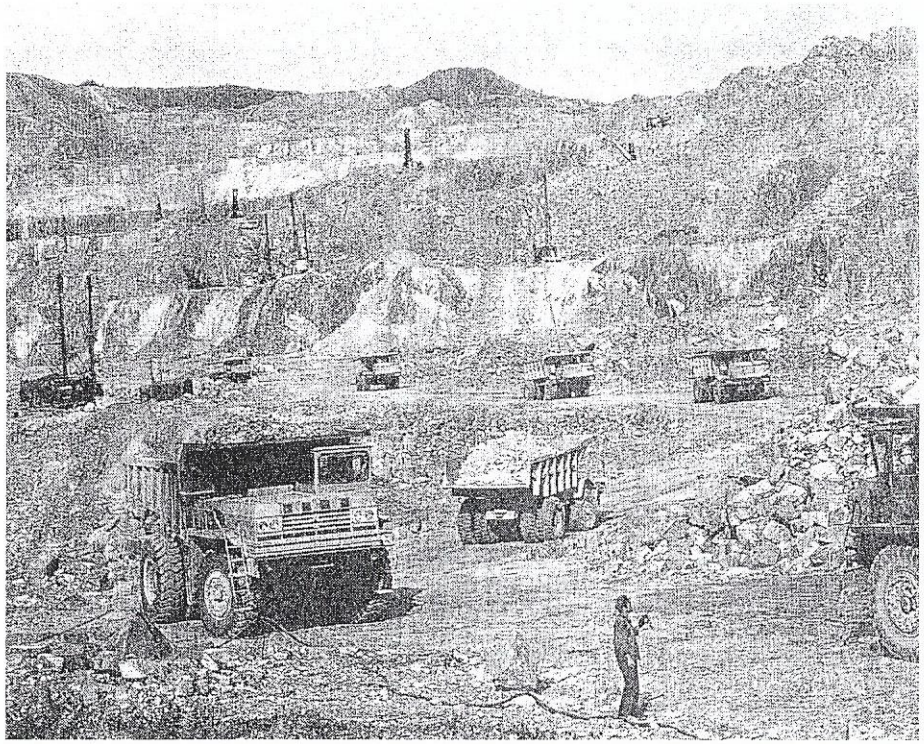
Konsors working environment.

Press photo of the first Sungrisan, 1970.

KUMSUSAN 40 TON

Mount Kumsu 40 ton dumper truck, from 1979.

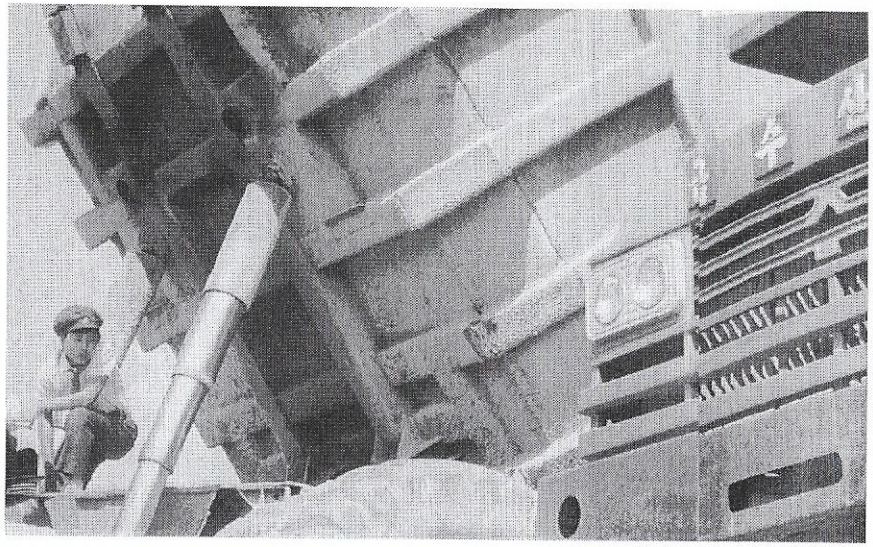
The production of the "Mount Kumsusan" truck is said to have been discontinued because of excessive fuel consumption, amongst other reasons. *Chosun Ilbo, February 5, 2002.*

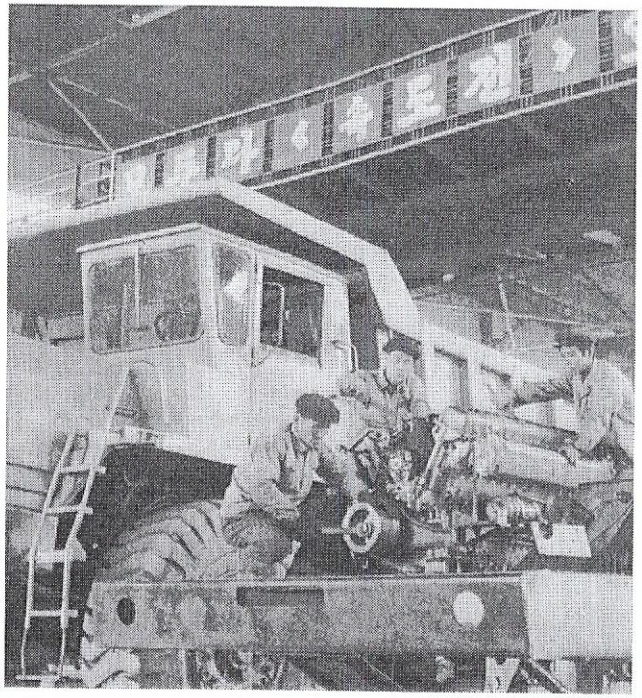


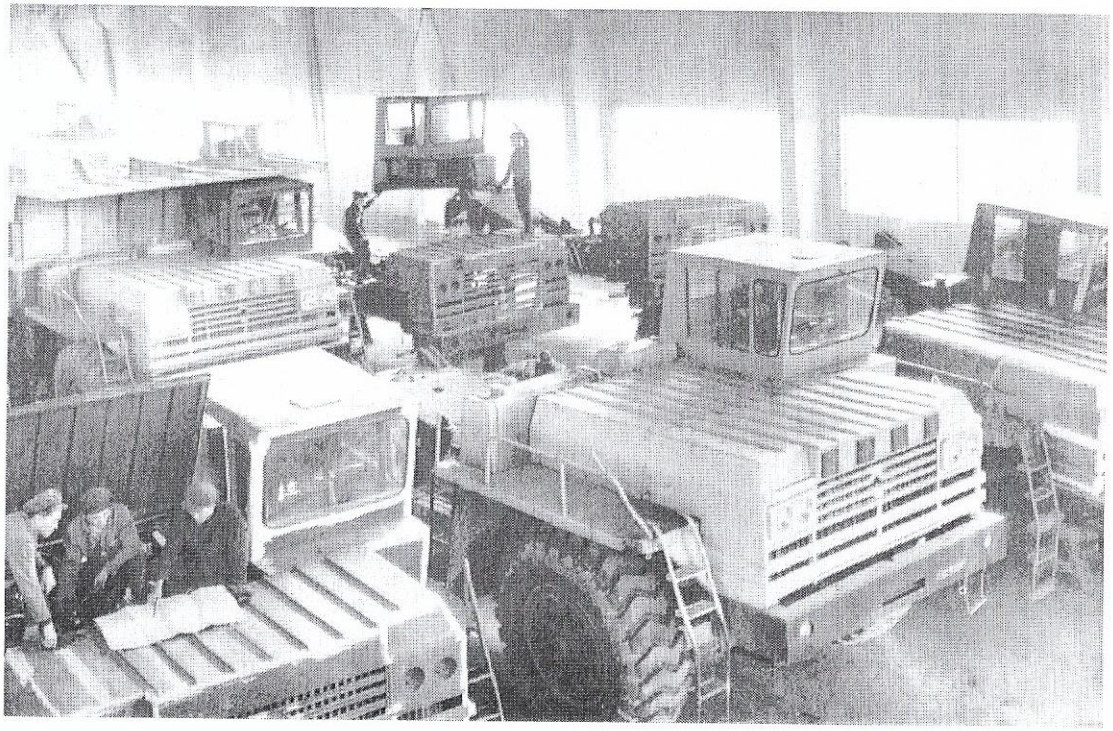
Kumsusan stamp, 1995

Kumsusan	
Payload	40 ton
Kerb weight	21030 kg
Gross vehicle weight	71700 kg
Dump body capacity	21 m3
Length	8620 mm
Width	3905 mm
Height	3495 mm
Wheelbase	3550 mm
Maximum speed	54 km/h
Min. turning radius	9.9 m
Fuel consumption	120 liter/ 180 km

Producing the
Kumsusan dumpers.

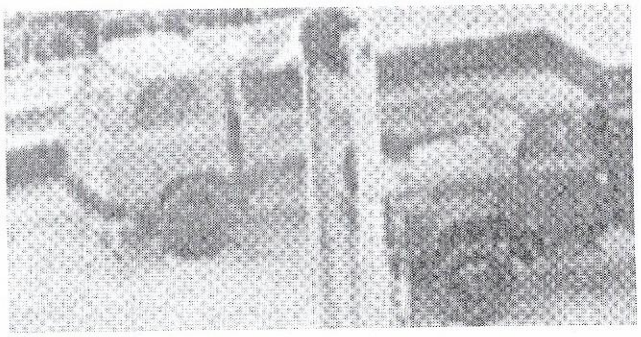


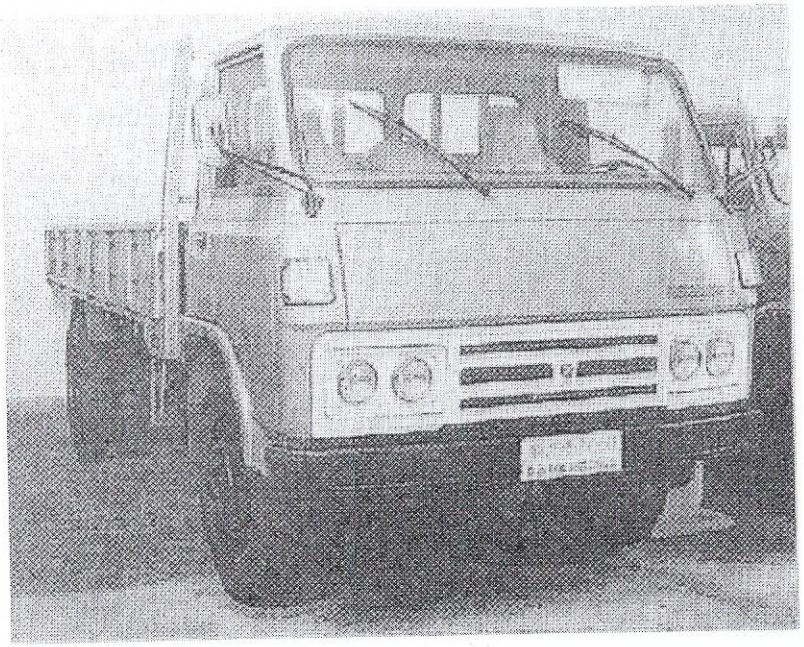




SONYON 2/3 TON CITY TRUCK

The Sonyon city transporter, circa 2/ 3 ton, was shown on a stamp in July 2000. Sonyon is translated as **Sunny.**





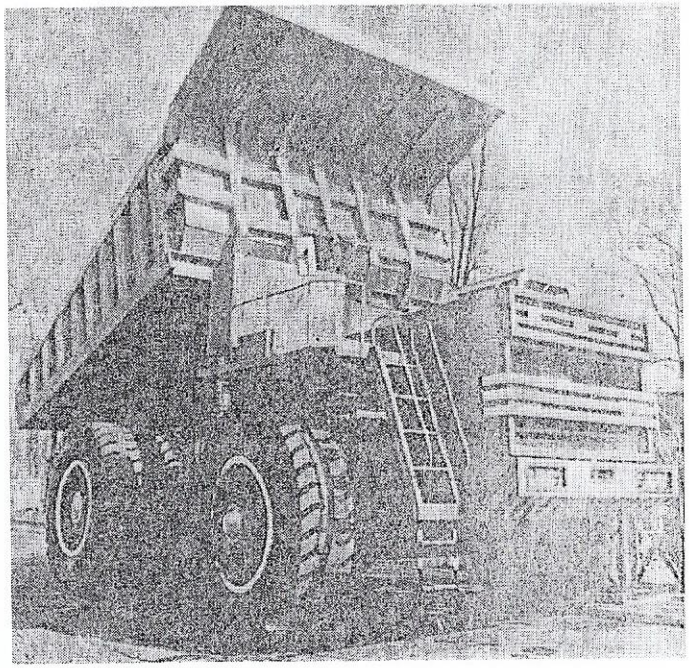
Other vehicles made by the Sungri Auto Works:

Chungsong bus

Chollima bus

HEAVY DUMPER MADE BY THE MARCH 30th WORKS.

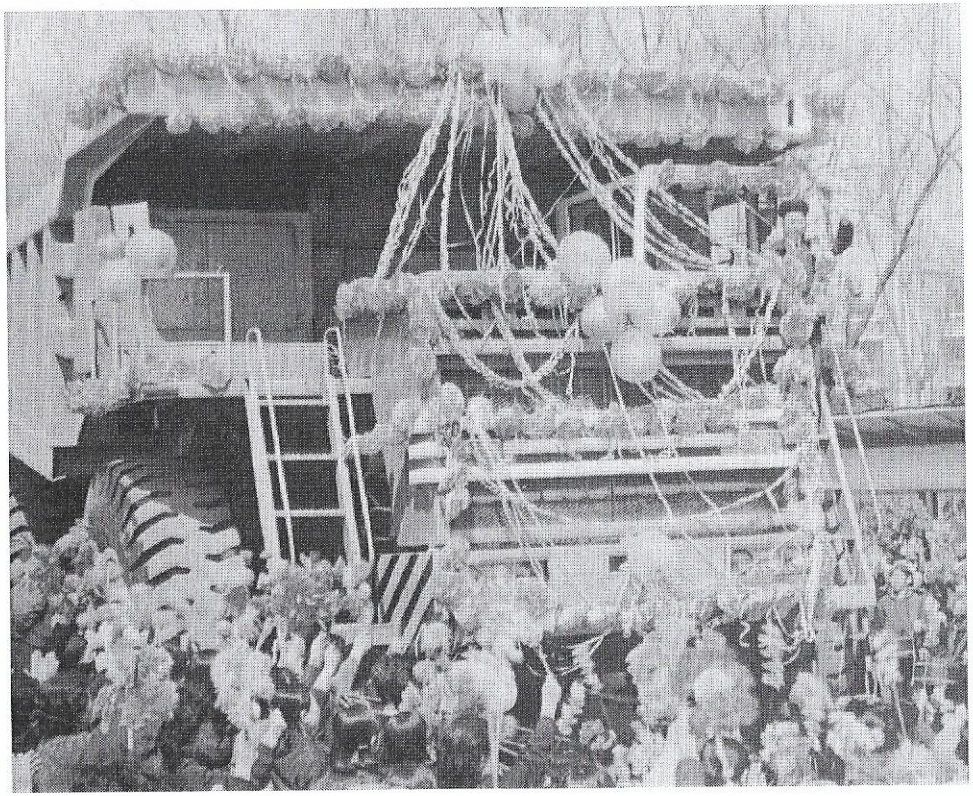
The old name of the factory was Pyongyang Coal Mine Machinery Plant. Location of the factory is Pyongyang.

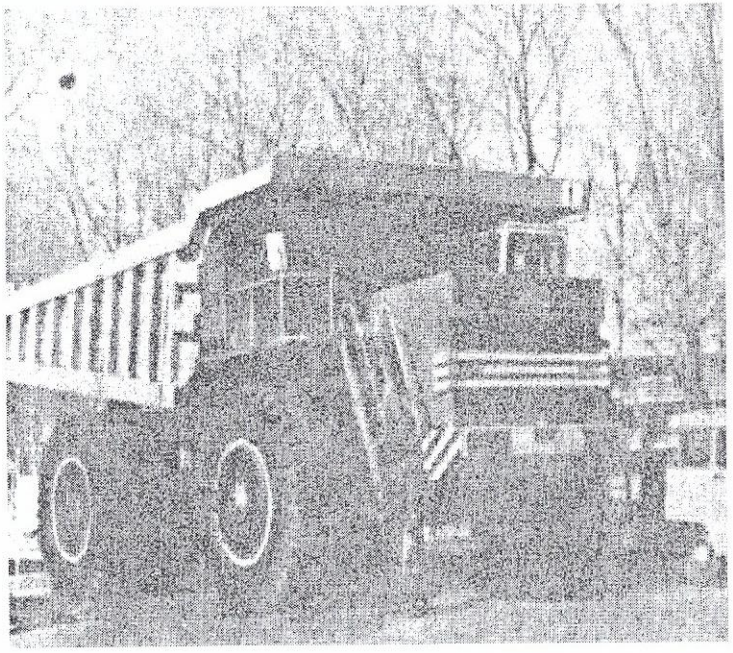


KONSOR 100 TON

A Konsor one-off 100 ton dumper was shown in 1975.

The workers and technicians of the March 30th Plant manufactured a 100 ton truck by their own efforts with their own technique and equipment through a dynamic speed campaign.
Korea Today No. 6- 1975 (225)



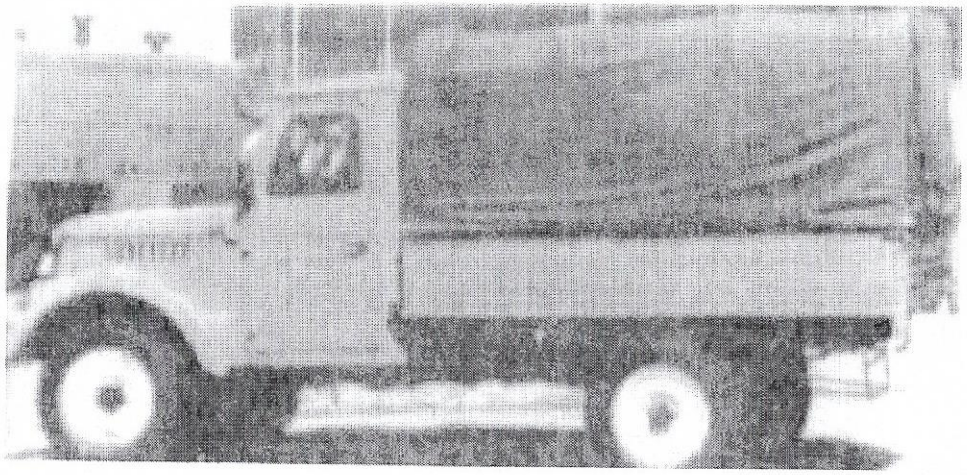


CROSS COUNTRY VEHICLES MADE BY THE PYONGSANG AUTO WORKS

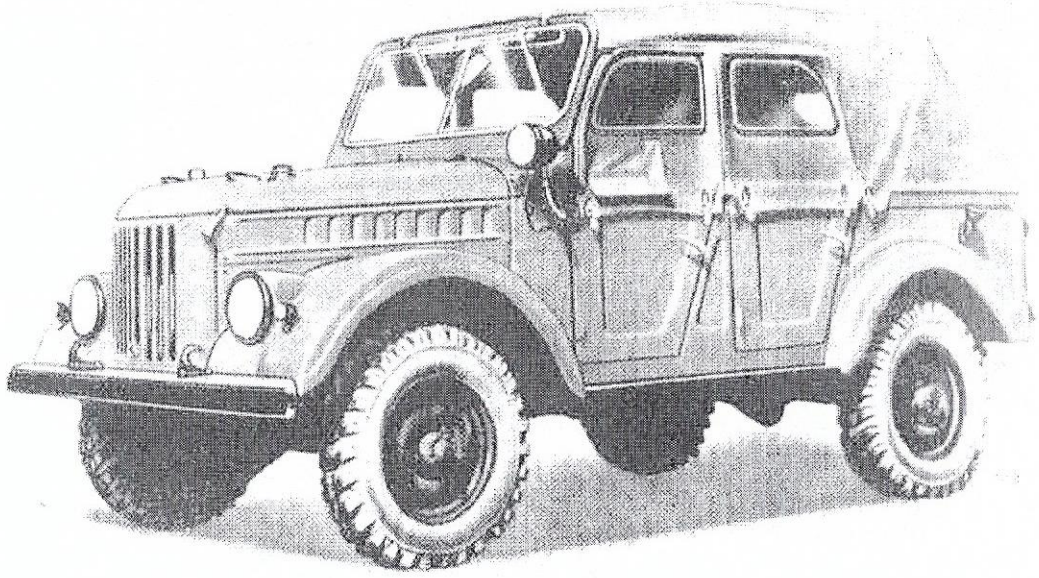
The Kaengsaeng cross country vehicles were made by the Pyongsang Auto Works in South Pyongan province. The factory was formerly known as March 16th Factory, and it was also referred to as Maram Kaengsaeng Plant. The size was 248.000 m2, the number of workers 7000- 8000.

The factory specialised in the production of military vehicles.

The Taepaeksan 6 ton truck was also made by this works.



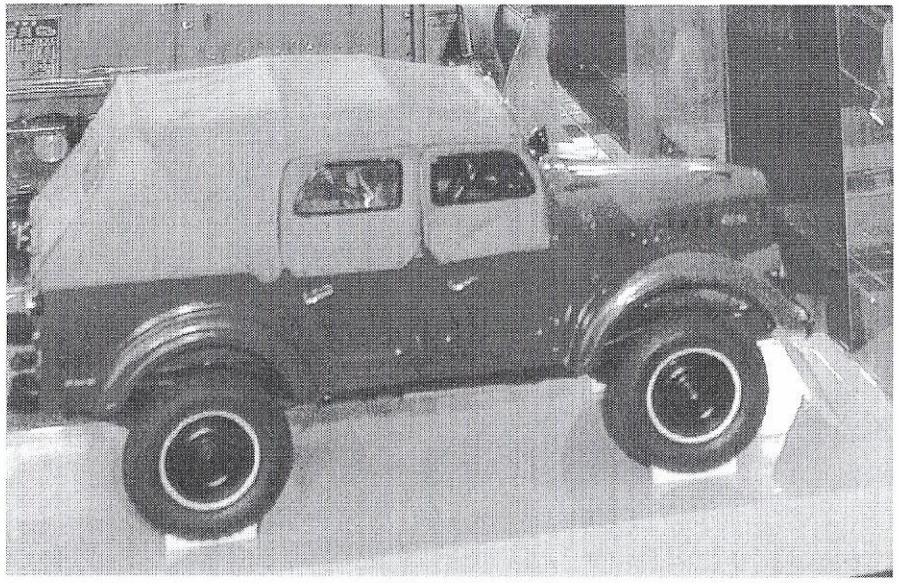
The original Russian Gaz 69 AM, the basis of the Kaengsaeng.



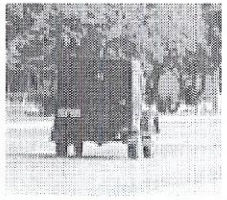
KAENGSAENG 69 and 69 NA

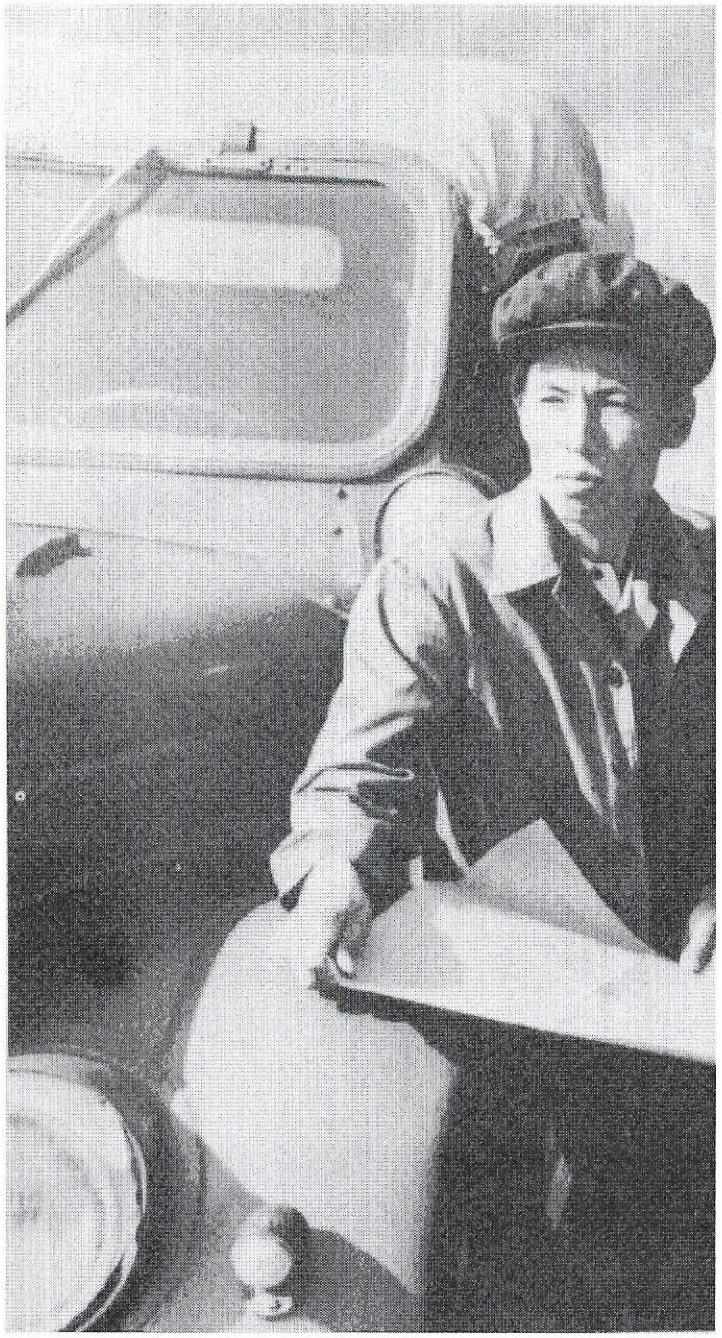
Perhaps the single most important model was the Kaengsaeng (**"Self Reliance"**), the North Korean copy of the GAZ 69, the hugely popular Soviet 4-wheeldrive produced in Russia from 1953 largely for military purposes and use in remote areas.
The Kaengsaeng was produced in Korea since 1968.
Kaengsaengs are still widely used. It remains the only passenger vehicle in North Korea that is locally produced in large quantities.

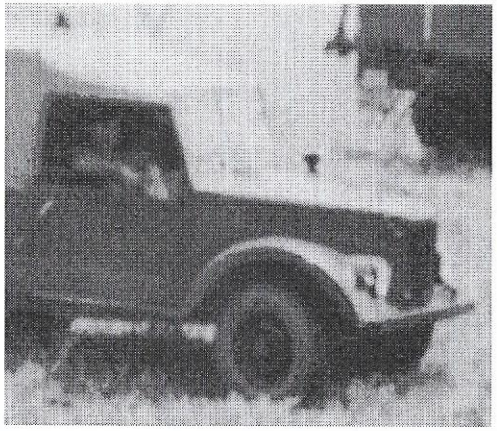
Model of the Korean GAZ 69.

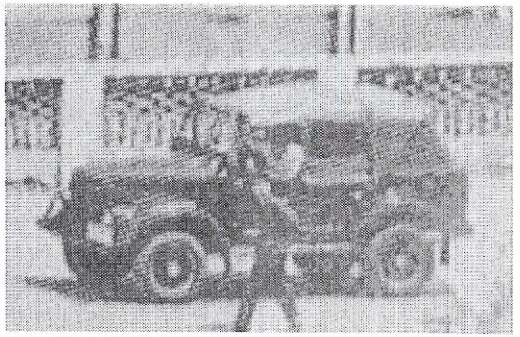


Two variants were made: a 4x4 half ton passenger version and a cargo model.







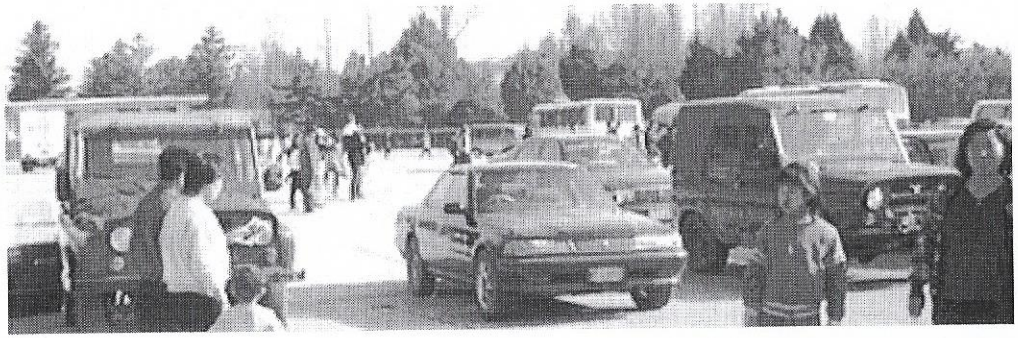


Kaengsaeng in Korean traffic.

KAENGSAENG 88

The proposed successor of the Kaengsaeng seems to be the Kaengsaeng 88.

Based on the UAZ 469, the Kaengsaeng 88 was shown together with the Paektusan Mercedes copy. If there was any production is uncertain.

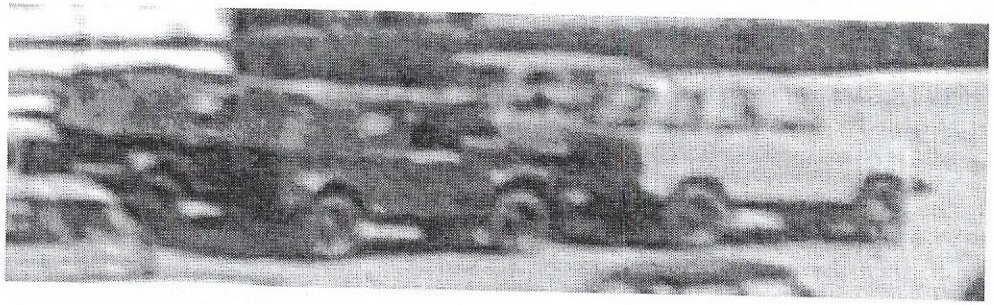


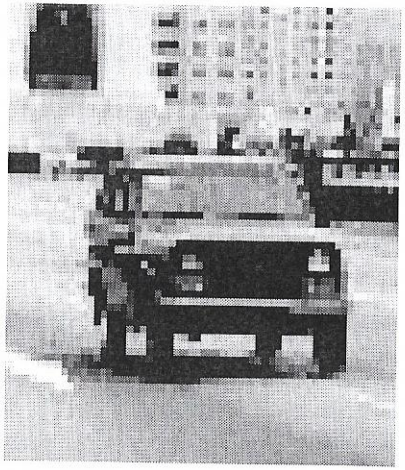
Russian UAZ 469 or Korean Kaengsaeng 88, with light alloy wheels.

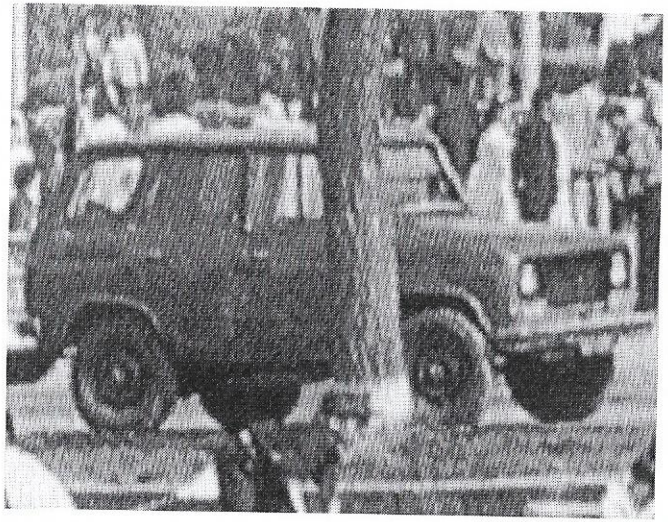
Korean UAZ 469 copy

UNIDENTIFIED 4 x 4s, PROBABLY BASED ON THE KAENGSAENG

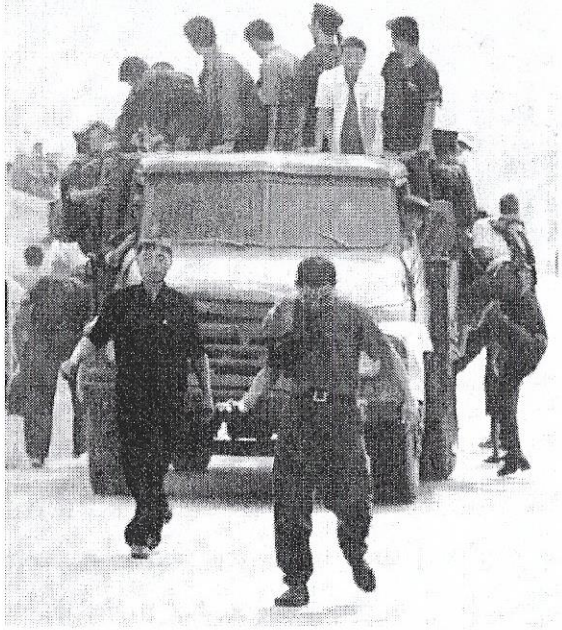
These are two different closed jeep-like models, made in the 1970s.



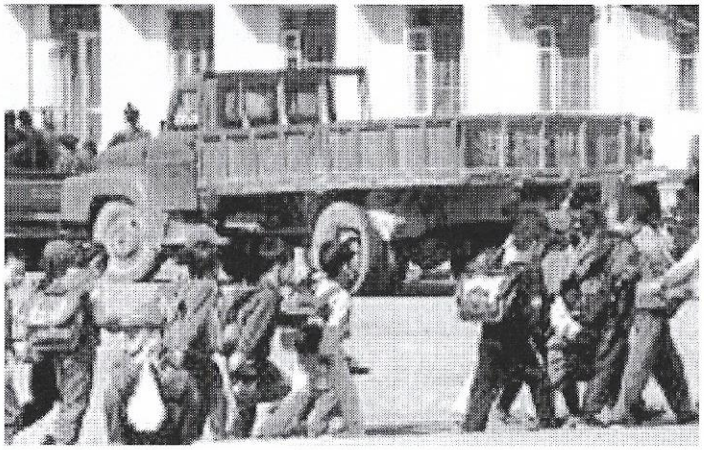


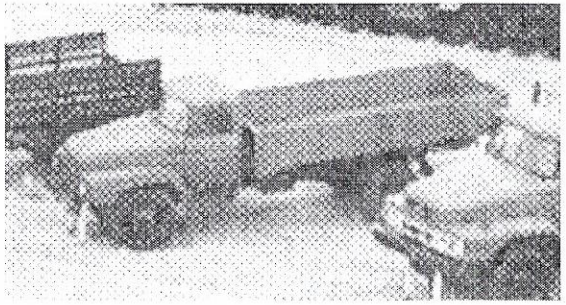


TAEPAEKSAN



There is not much known about the Taepaeksan (Taebaeksan), it was a 6 ton truck produced in the 1970s. Production ceased in 1981.





According to some sources this truck was made by the Sungri Works.

In the future, Taebaeksan lorries must be converted into refrigerator vans for Pyongyang and the provincial cities. Kim Il Sung, January 4, 1979

Truck, same size but other front end.

TROLLEYBUSES MADE BY THE PYONGYANG TROLLEYBUS WORKS

Trolleybus production started in Pyongyang in 1961. Many different Chollima buses were made here. From 1990 production of the Chongnyon, the Chongnyonjunwi and the Sonyon took place.

Unlike the imported diesel buses, the trolley-buses are produced locally, at a Pyongyang factory. The bodies of the buses are made manually since, apparently, the factory does not have suitable hydraulic presses. The sheet metal has to be hammered, and thus the surfaces of the Pyongyang trolley-buses are invariably covered with dents. It should be said, however, that this backward technology is partly compensated for by the diligent and consistent labor of the Korean drivers and repairmen who work devotedly to ensure that their devices are reasonably roadworthy. The Korea Times, August 31, 2003.

The Pyongyang Trolleybus Works was formerly named Pyongyang Truck Repair Works. Besides of the trolleybuses, minibuses were made.

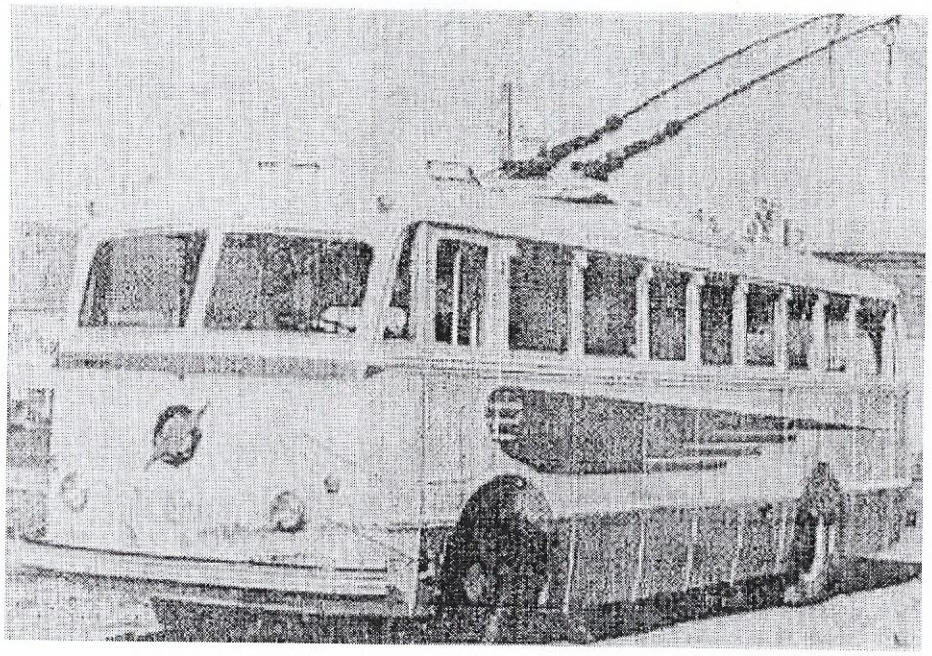
5000 workers were employed here, factory's surface was 63.000 m2.

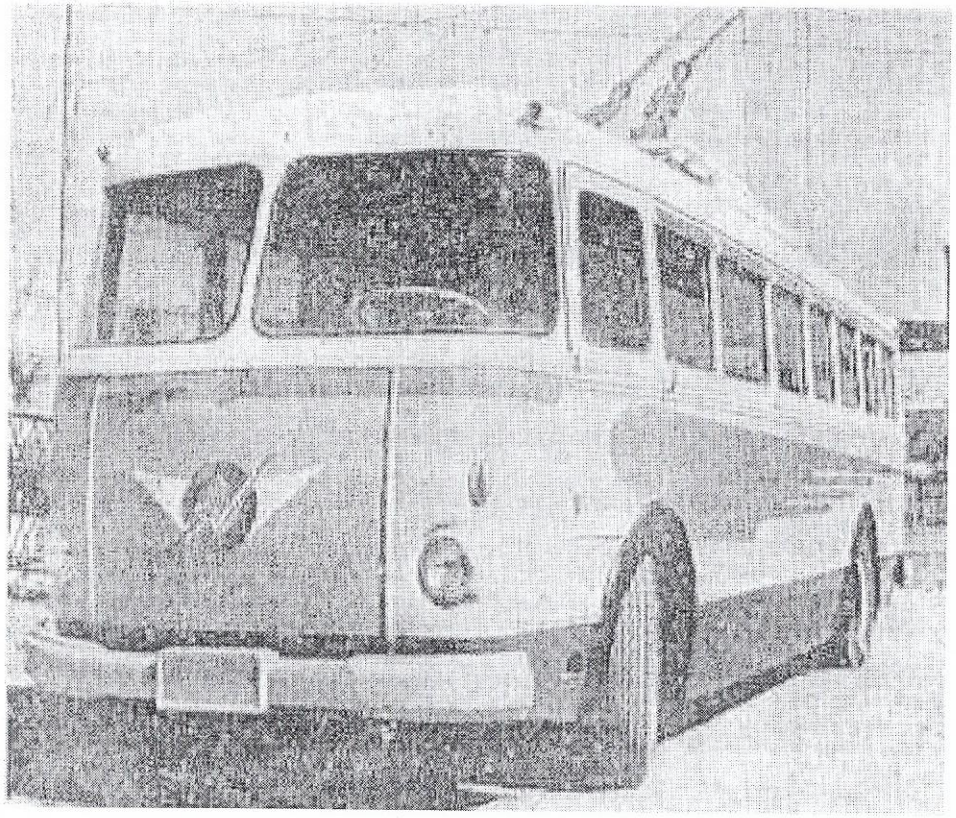
A rectangular, newer Chollima type, the Chongnyonjunwi.

A long queu for the Chollima 903.

CHOLLIMA 1/ 2/ 9.11

*The first trolleybus, Chollima 1 (also written as Chonlima) was built in May-June 1961, by the Pyongyang Trolleybus Factory (which had the name "Lorry Repair Factory " until April 1969). It had a streamlined appearance and interior in national style, and a special Chollima (**"Flying Horse"** or **"Pegasus"**) emblem. Temporary wires were erected at the factoryfor testing purposes and on 11th September 1961 (the opening day of the 4th congress of the Labour Party of Korea) the new vehicle, by this time with some improvements and redesignated Chollima 2, was finished.*





However, in commeration of the date it was launched as the Chollima 9.11. The principal design changes from the prototype were that the sloping corner windows were omitted, the front window was more rounded, and the emblem was changed.

During September 1961 the factory built five more Chollima 9.11 vehicles. During the autumn of 1961 and the spring of 1962 twelve trolleybuses (each having a capacity of 65 passengers) were built. By the beginning of 1964 130 such trolleybuses had been delivered to Pyongyang. Production if the type ceased in 1970.

(text Trolleybus Magazine No. 244, page 78)

Production models of the 9.11. Bus to the left is the Pyongyang 683.

CHOLLIMA 9.25

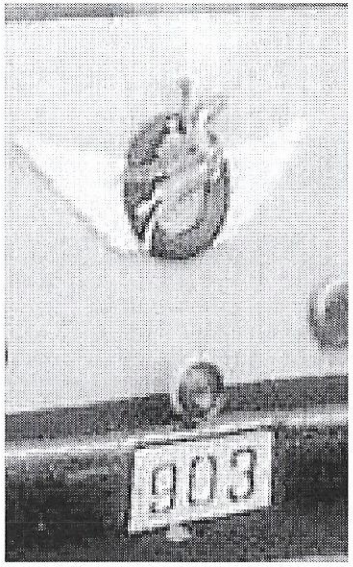
The prototype of the articulated Chollima 9.25 model was completed in the autumn of 1963. It had a length of 13.5 metres, capacity for 120 passengers, five two-leaf doors, and distinctive bulging headlights. The first five such vehicles entered service in Pyongyang on 31st December 1963.

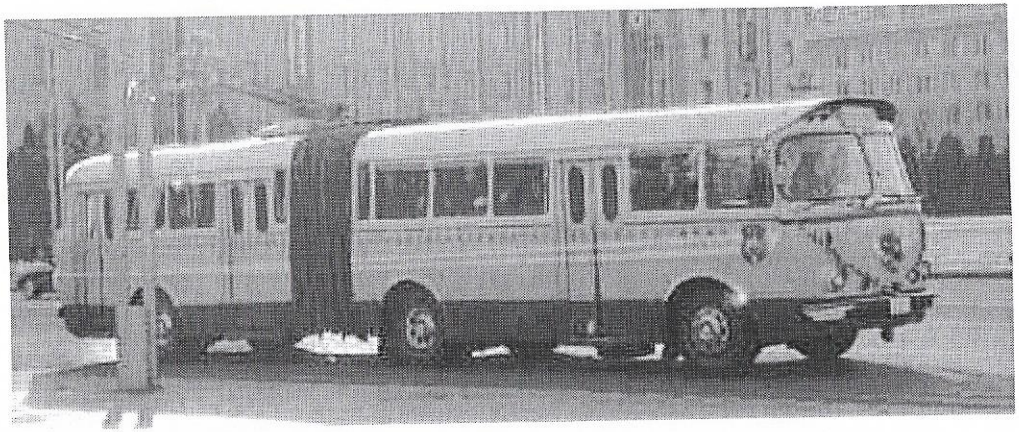
Eventually, Pyongyang had fifty of these trolleybuses, some of which were later transferred to other systems, including Kowon. Production of the type ceased in 1967 when the factory commenced the production of buses.

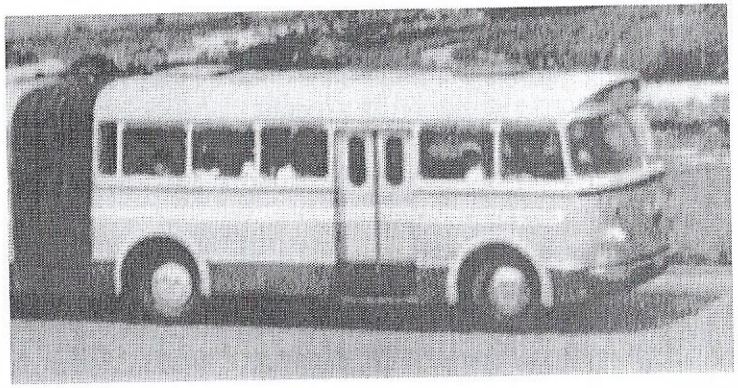
(text Trolleybus Magazine No. 244, page 79)

Korea Today (1964/4) gives the dimensions: 13.60 x 2.50 x 3.30 mm.

All recent pictures show the Pyongyang 903. Chollima 9.25 had a beautiful Flying Horse symbol.

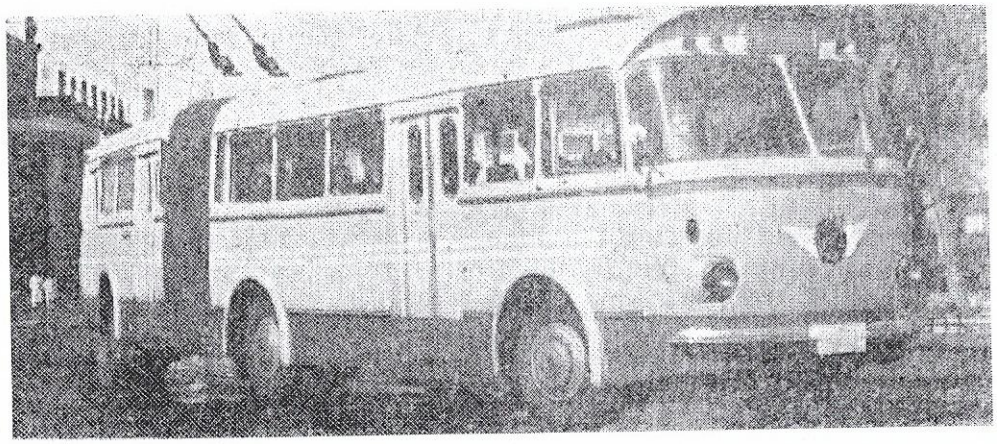






The Chollima 9.25 was introduced together with the Pyongyang 9.25, a petrol engined bus.

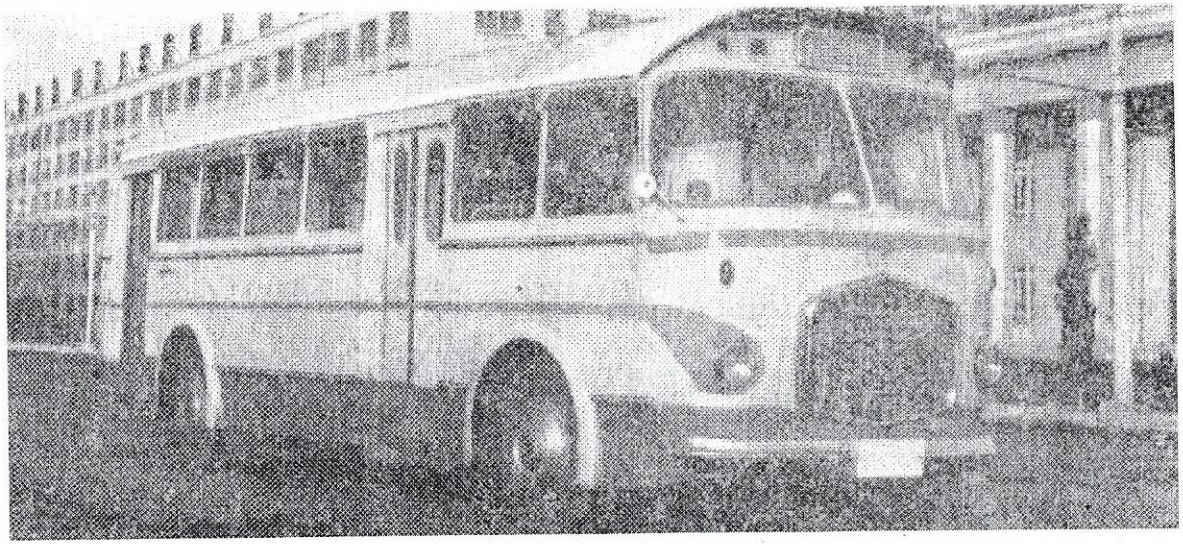
By the end of 1966, there were fifty Chollima 9.25 in Pyongyang.



PYONGYANG 9.25

The Pyongyang 9.25 city bus was the gasoline version of the Chollima 9.25 trolleybus. It was an unarticulated bus. Maximum speed 65 km/h, capacity 65 passengers. Length 9.50 mm, width 2.50 mm.

Long distance coaches from the same period



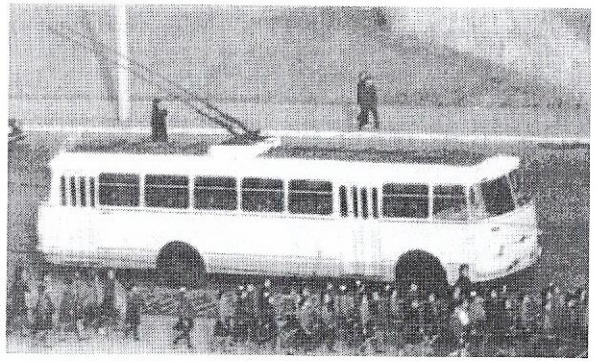
CHOLLIMA 70

The production of a new two-axle trolleybus, the Chollima 70 with longer and more streamlined body, was finished in 1969-1970. Production of this model took place between 1970 and 1972 with all vehicles being delivered to Pyongyang. It had another version of the emblem.

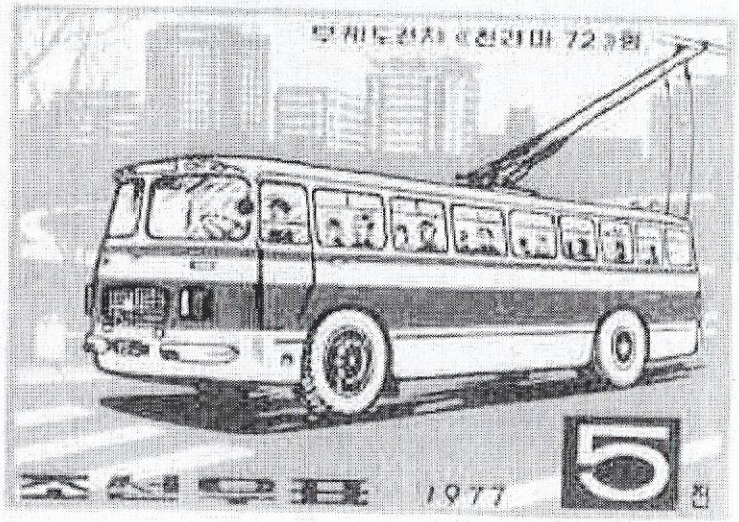
(text Trolleybus Magazine No. 244, page 80)

Pictures here show the Pyongyang 184, the 801, the 813 and the 819, all with with chrome bumpers and wheel trims. Other bus seen was the 137.

Chollima 70. The motorcar in front (left) is a Chinese Hongqi.



CHOLLIMA 72 (PHIPATA)

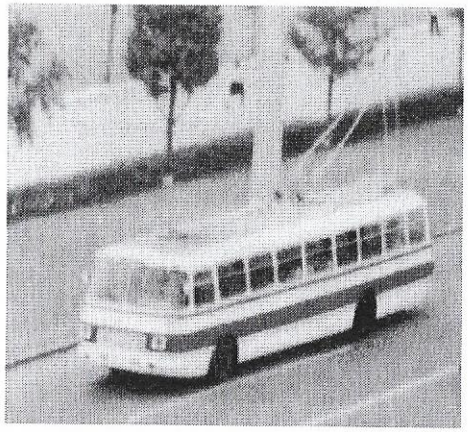


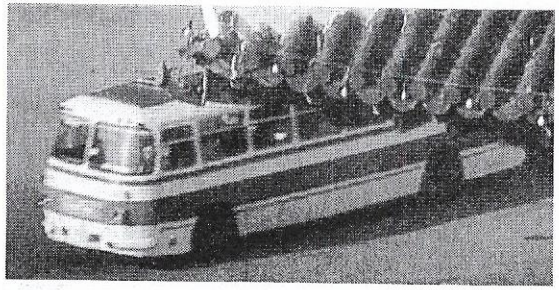
Trolleybus Chollima 72, stamp April 1977

Kim Il Jung ordered the factory to start the production of a new type, an updated version of the Chollima 70. The first vehicles of this type appeared on the streets of Pyongyang in the last days of 1972 but they did not enter revenue service until February 1973. The original name for this model, Phipata, was later changed to Chollima 72. Few of this type, equipped with rectangular headlights, were built because in 1974 the factory turned to the production of a new model, the Chollima 74.

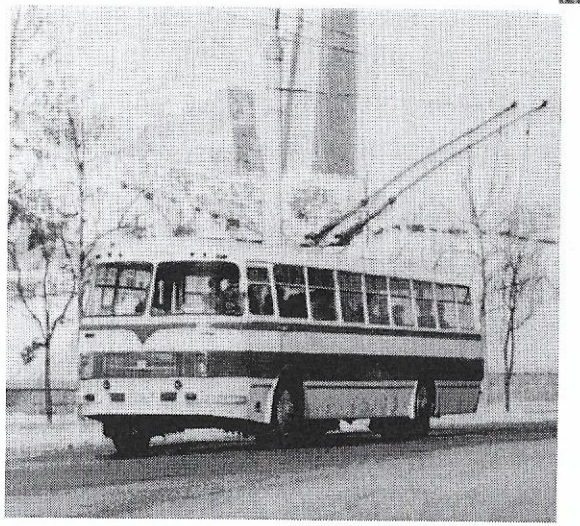
(text Trolleybus Magazine No. 244, page 81)

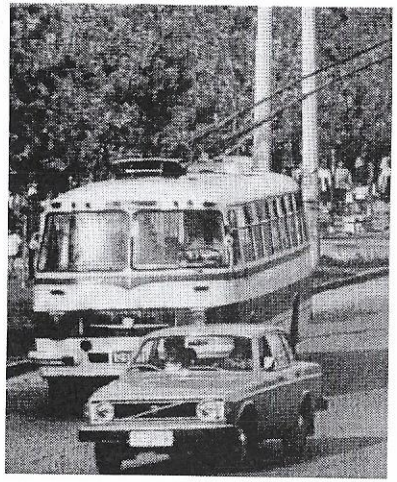
Upper picture: The Pyongyang 211. Each star on the side of the vehicle indicates 50.000 km of service. Other buses seen were the Pyongyang 164 and 200.

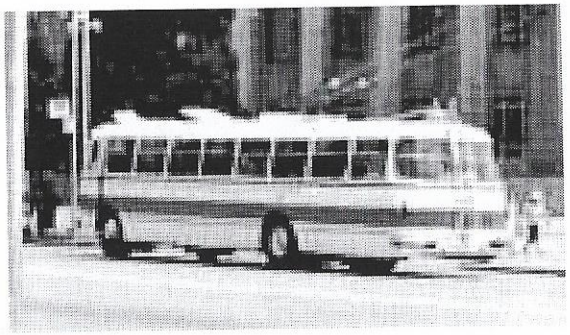




Several shots of the Chollima 72 with the typical rectangular headlights in Pyongyang traffic.







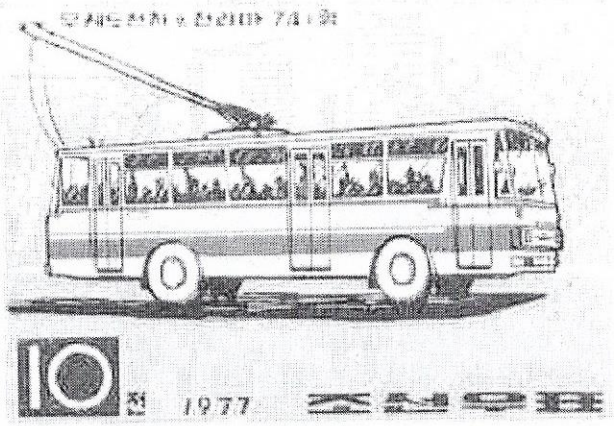
Pyongyang 118, March 2006, each star is 50.000 km.
So 40 stars is 2 million kilometers...

Original version showed rectangular headlights, later versions round ones.

CHOLLIMA 74

The two-axle Chollima 74 was very different to the streamlined Chollima 72, being much more angular, with a new windscreen design, and a new design of headlight. This model was more popular and was in production between 1974 and 1984. The motors were supplied by the Taean Heavy Machine Complex.

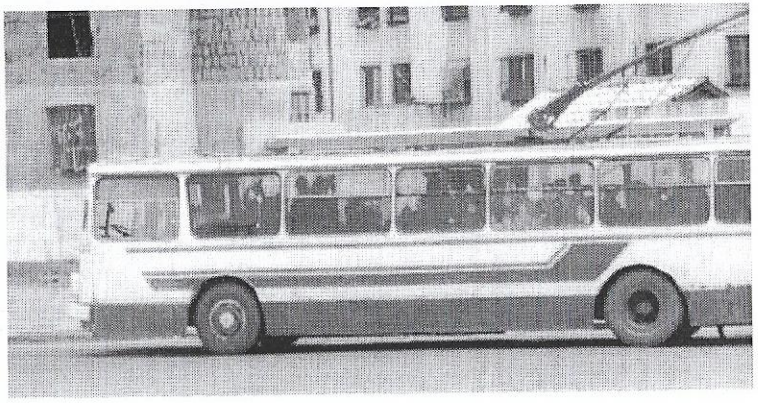
(text Trolleybus Magazine No. 244, page 81)



Chollima 74, stamp of April 1977.

The photos show the Pyongyang 457, 463, 520 and 877. The Pyongyang 581 was also seen.

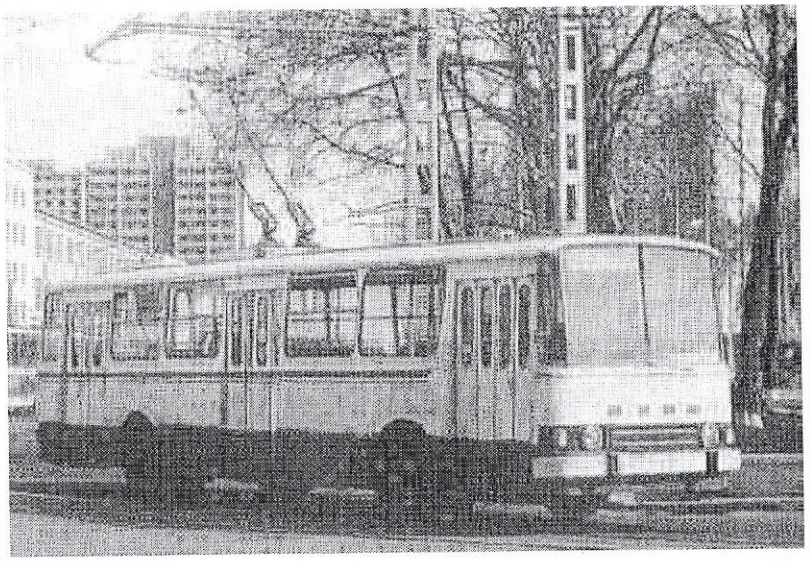
Chollima 74, the later models had a different front and grille, with round headlights.



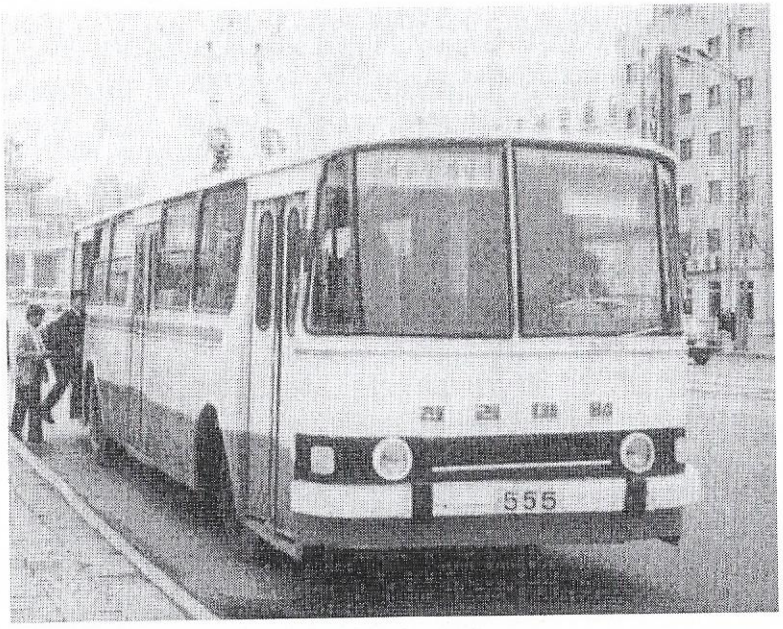
CHOLLIMA 84

In 1984 production commenced on the two-axle Chollima 84, which was similar to the Chollima 74. It had the same body design, the main difference being that all doors had four leaves and another style of headlight was fitted. Production of this model lasted until the mid-1990s.

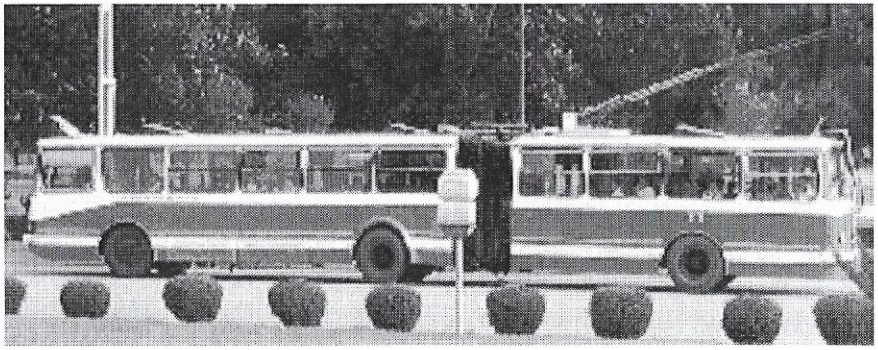
(text Trolleybus Magazine No. 244, page 81)



Pyongyang 103 and 555 belong to this range. The buses Pyongyang 148, 242, 553, 577, 581, 625, 628, 629, 631, 637, 675, 678 and 747 are also of the Chollima 84 model.



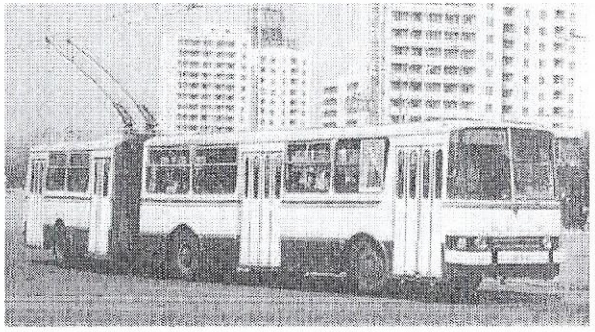
CHOLLIMA 962

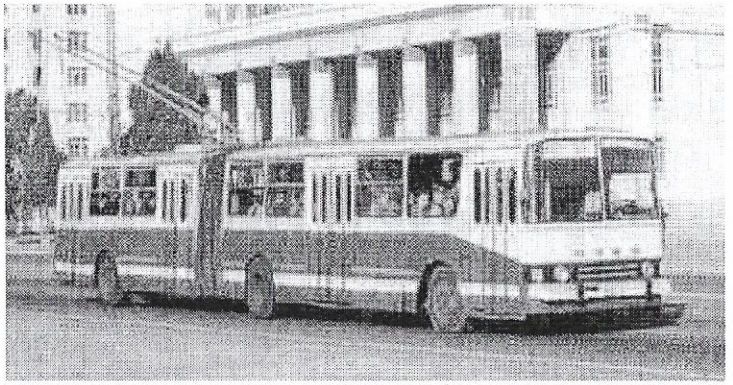


A further development was the articulated 962 (usually these vehicles do not carry this inscription, but only the name Chollima), which was introduced in 1987. This model had a more rounded windscreen and four doors (all with four leaves); it was 16.8 metres long, 2.53 meters wide and had a capacity of 170 passengers.

(text TrolleybusMagazine No.244, page 81)

Production was probably from 1987 till 1990.

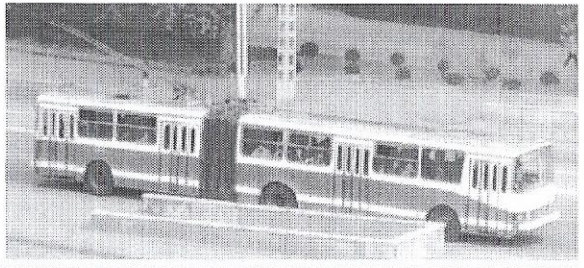




On the photos: the Pyongyang 105, 142, 316, 653, 699 and 973.
Not on the photos: 212, 217, 222, 262, 310, 357, 663, 941, 944, 975, 985.

Three more pictures of the Chollima 962, nearly 17 meters long.

The articulated Chollima 962 is still very common in Pyongyang.



CHOLLIMA 962 SECOND MODEL

Bus 360 to the right seems to be a variation on the 962 front end, with a destination board above the front windows.
Note rectangular direction indicators and the omission of the Chollima characters from the nose.
Bus 768 (?) to the left is a standard Chollima 962.

CHOLLIMA 90/ 903 (SOGIRYON)

In August 1990 the factory produced a new articulated bus, the Sogiryon, for 170 passengers and later used the design for a new articulated trolleybus, which had the conventional designation Chollima 90 articulated, although it showed only Chollima on the bodywork. The principal design change was the semi-rounded windscreen and the sloping corner window of the driver's cab. A narrow destination indicator was incorporated above the windscreen. Another variant of the manufacturer's badge was fitted.

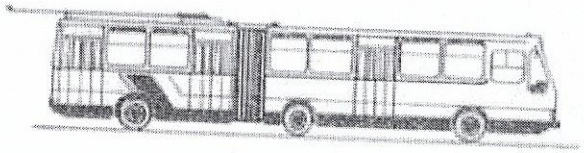
(text Trolleybus Magazine No. 244, page 81)

Chollima 903	120 passengers
Seating capacity	48 seats
Kerb weight	14700 kg
Engine	550 V/ 95 kW
Length	16830 mm
Width	2530 mm
Height	3510 mm
Travelling speed	45 km/h
Min. turning radius	9 m

Trolleybus Chollima 84, stamp of February 1992.

Several designations are used for this bus: on a stamp, the bus is –according to the author wrongly!- called 84, on an industrial exhibition the bus was named 903.

Above: The Pyongyang 132. Others were the 359, 360 and 950.



KWANGBOKSONYON

Articulated bus, perhaps powered by a diesel engine, based on the Chollima 90.

Stamp of February 1992.

CHONGNYON

*In 1990 the factory started production of the two-axle Chongnyon (**"Youth"**) model, based on the Kwangboksonyon bus, for use in the provincial systems.*

(text Trolleybus Magazine No. 244, page 82)

Hamhung 158, a Chongnyon.

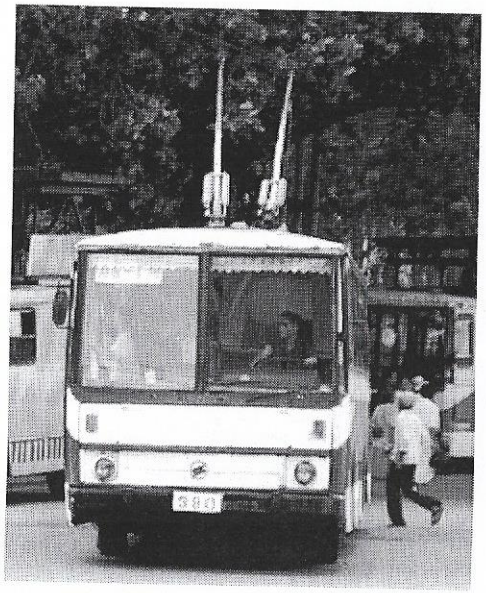
CHONGNYONJUNWI, type 1 and 2

The characters on the bus suggest that this is the Chongnyonjunwi.

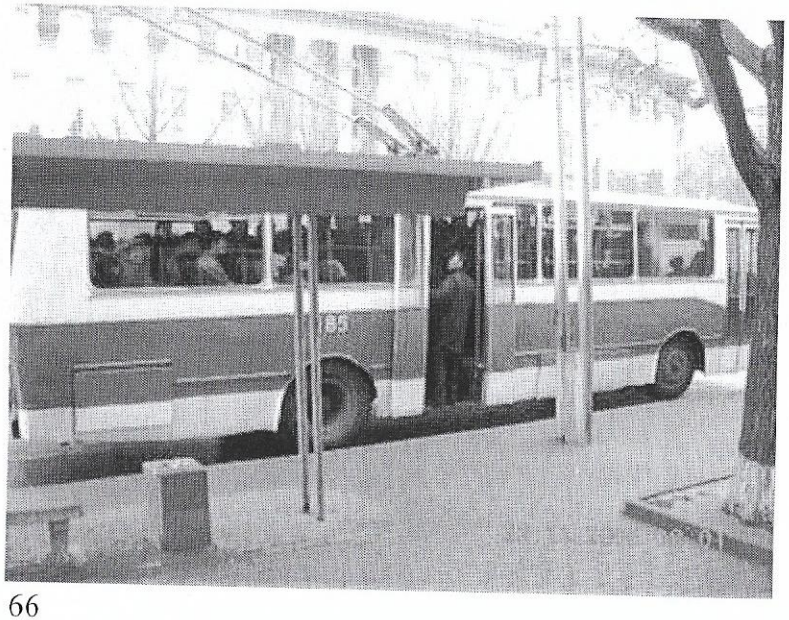
Two models: 1. with three passenger doors, all double leaf. 2. with two passenger doors, double leaf.

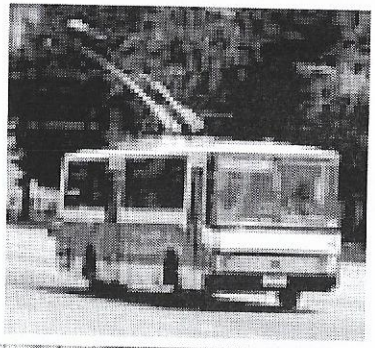
Note extra headlights

The Pyongyang 100, 133, 185, 232, 282, 347, 380, 663, 867, 911, 976 and 979.



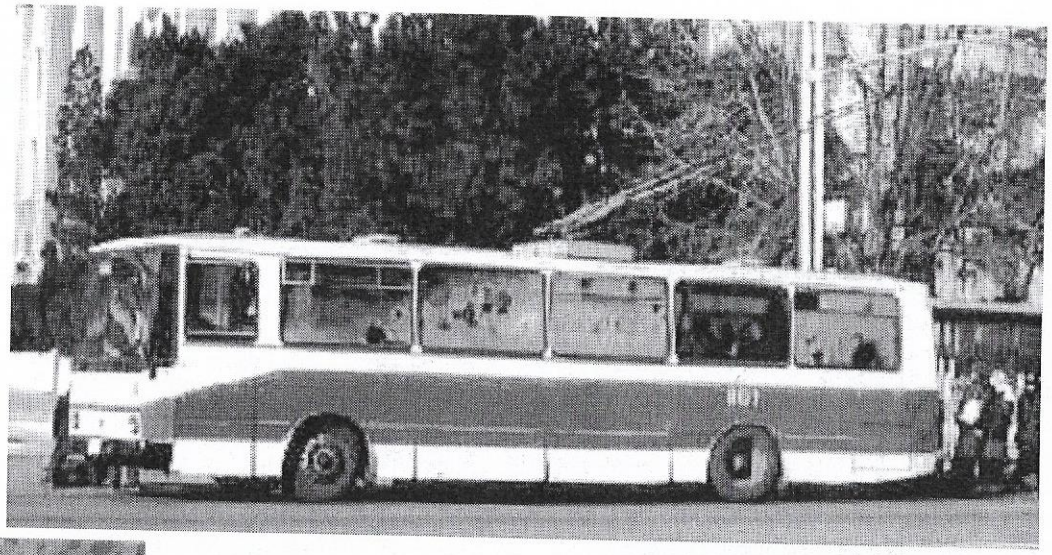
Several Chonyonjunwi buses, Pyongyang.

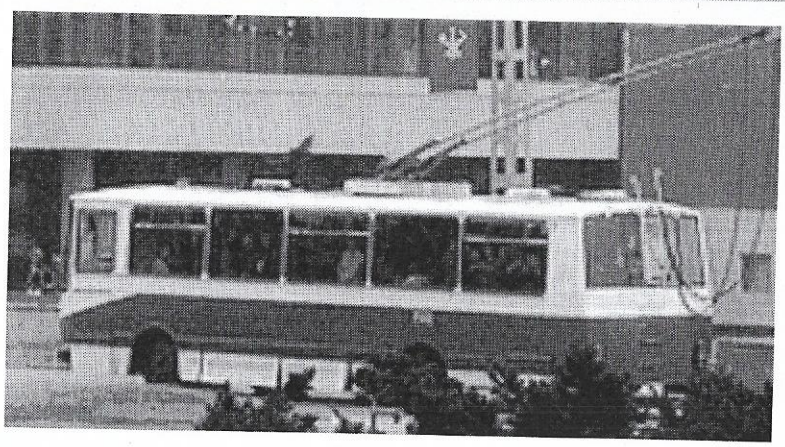


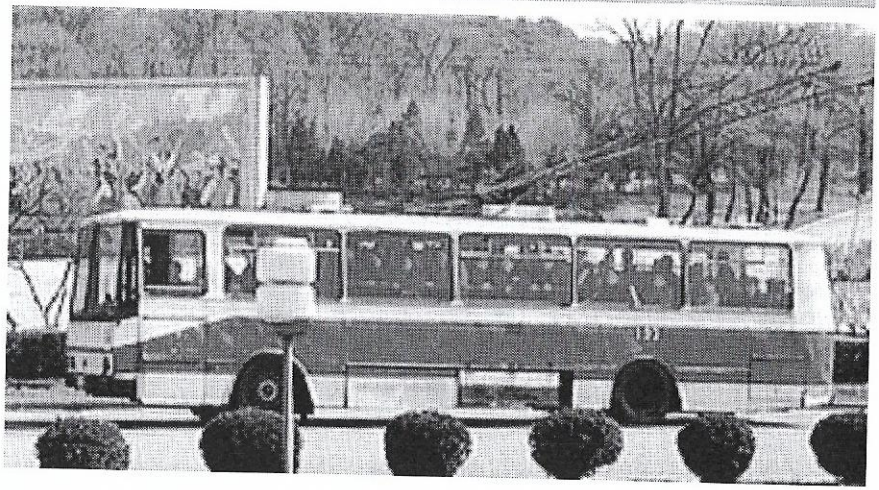


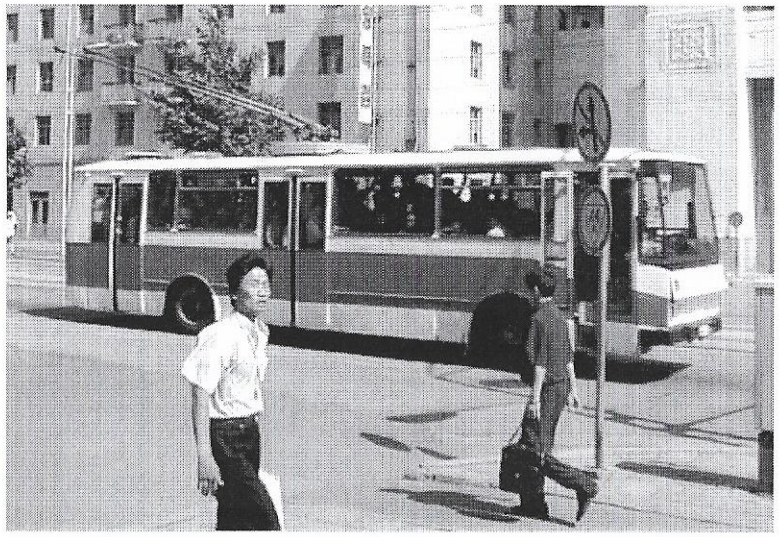
*More recently, the articulated Chongnyonjunwi (**"Youths' vanguard"**) was introduced in April 1996.*

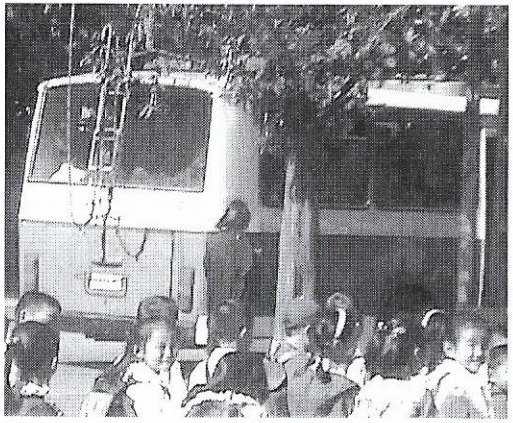
(text Trolleybus Magazine No. 244, page 82)











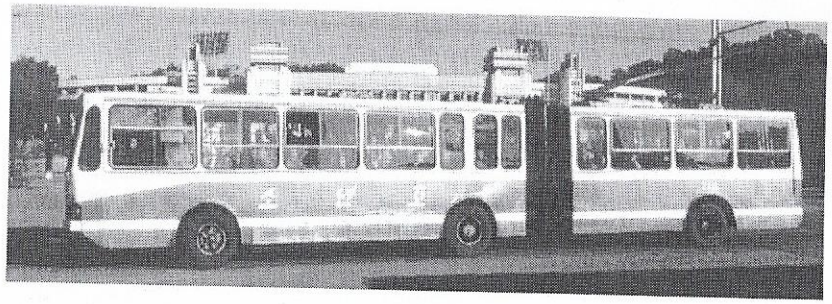
Right: Maintenance vehicle.

The trolley bus to the right has also a telescopic work-platform.

SONYON or CHONGNYONJUNWI

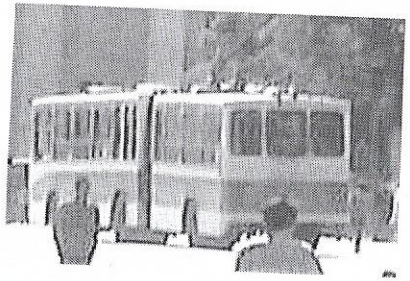
Pyongyang 102, 115, 230, 636.

On the bus is written: Sonyonho which means **"Sunny"** brand.



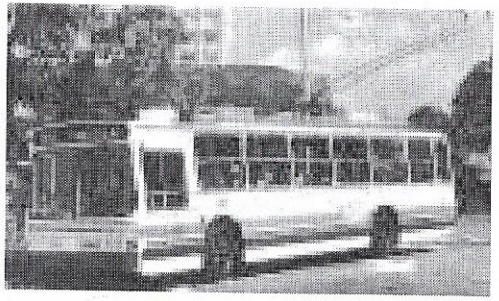
The articulated Sonyon was introduced in April 1999. Ten were put in service on the birthday of Kim Il Sung, April 15.

Pyongyang 115 (left) bears the name "**Chongnyonjunwi**" at the front.



CHOLLIMA 032

Production of the Chollima 032 trolleybus started in March 2004. The bus is updated and uses 30% less energy.



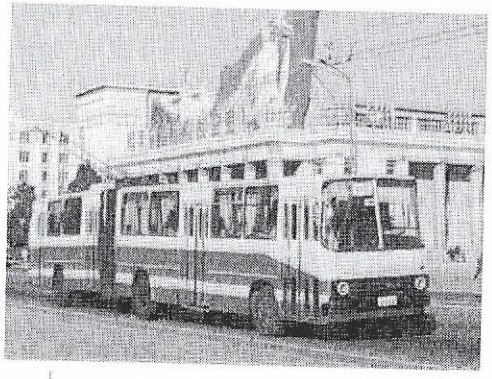
CHOLLIMA IKARUS TYPE

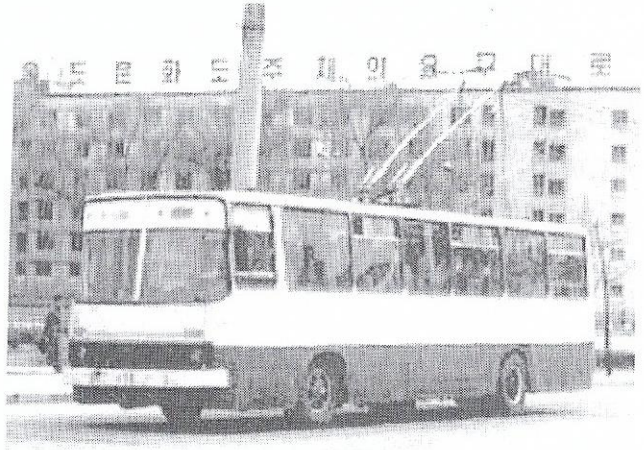
At least four articulated Ikarus trolleybuses (Hungary) have been built for Korea and were locally assembled in the Pyongyang Trolleybus Factory.

Pyongyang 212 articulated (left below) was made in 1997 on the basis of the Ikarus IK-280. The rear axle had single wheels and was steered.

Pyongyang 243 articulated (to the right) and 244 (middle) was a construction of two IK-260 solobuses, the axles on the articulated rear part were similar to the rear axles of the front bus, fitted with doublewheels. The rear axle was not steered.

Pyongyang 171 two-axle (right below, two pictures) was based on a 1997 Ikarus IK-260 bus.





BUSES MADE BY THE CHONGJIN BUS WORKS.

The Chongjin Bus Works produced Jipsan trolleybuses since 1974 and Jipsan buses since 1988. Since 1989 another Chongnyonjunwi trolleybus is made here. In this factory worked 1300 workers on a site of 82.000 m2.

PYONGYANG 86 or JIPSAN 86

Probably made in 1986. Also referred to as Jipsan 86.

Stamp of February 1992, Pyongyang 86

Jipsan 88 and Jipsan 86.

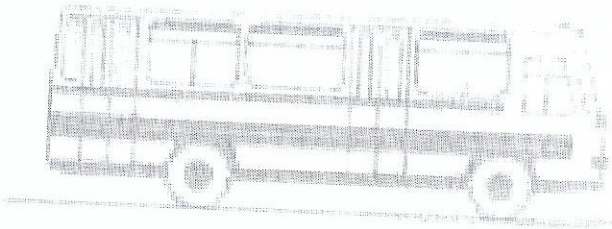
JIPSAN 88

Jipsan, Jipsam or Chipsam medium bus, the name is literally translated as **"Gathering and Distribution"**.
The Jipsan 88 medium size bus bus was shown at an industrial Exhibition in Pyongyang, together with the Jaju 82, Konsor 25 ton, Kumsusan 40 ton and Chollima 903.

Jipsan 88	33 seats
Gross vehicle weight	7340 kg
Engine	Four stroke diesel
Maximum output	145 hp/ 3200 rpm
Compression ratio	17.8: 1
Length	9140 mm
Width	2340 mm
Height	2915 mm
Wheelbase	4600 mm
Maximum speed	93 km/h
Min. turning radius	9.85 m

Stamp of February 1992, Jipsan 88

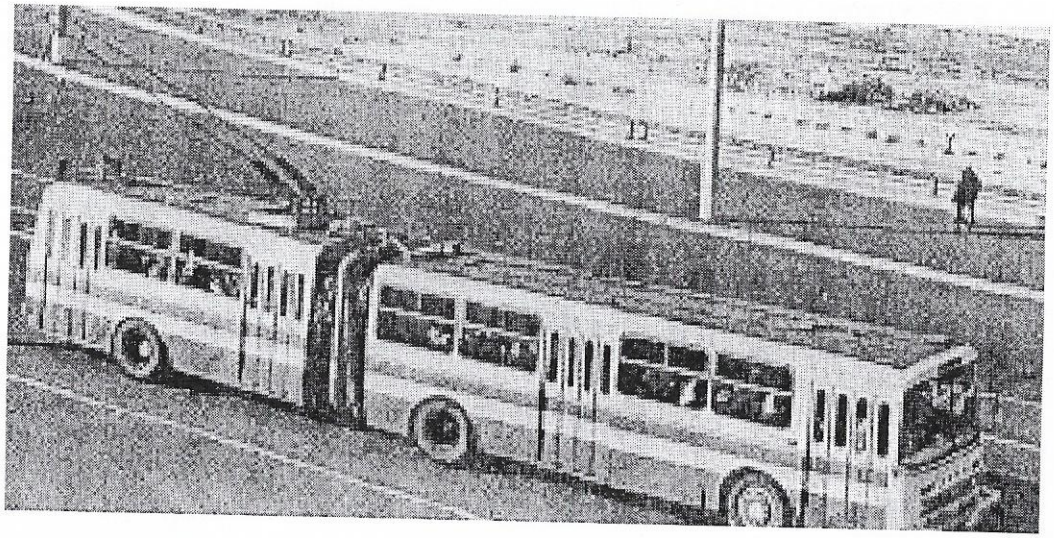
Jipsam medium size bus exhibits an outstanding performance even on a road with a steep gradient. Korea Foreign Automobile Ryonun Company, text on exhibition.



JIPSAN 74 and JIPSAN 85

The Chongjin Bus Factory started trolleybus production in 1974 (- 1989) with the two-axle Jipsam 74, which was almost identical to the Chollima 74 (design, number of doors and windows, headlights). An articulated Jipsam 85 (see photo to the right), in production from 1985 to 1990, had an angular, four door design.

(text Trolleybus Magazine No. 244, page 82)



Jispam 85 articulated.

CHONGNYONJUNWI

*Using the design of its Jipsam 88 bus, the factory started production of a smaller trolleybus model, also designated Chongnyonjunwi (**"Youth's Vanguard**"), which was delivered to small systems in the north-eastern part of the country.*

(text Trolleybus Magazine No. 244, page 82)

The bus was 11.24 m long and was introduced in November 1998.

Chongnyonjunwi in Onsong.

FACTORY UNKNOWN OR UNCERTAIN

PAEKTUSAN

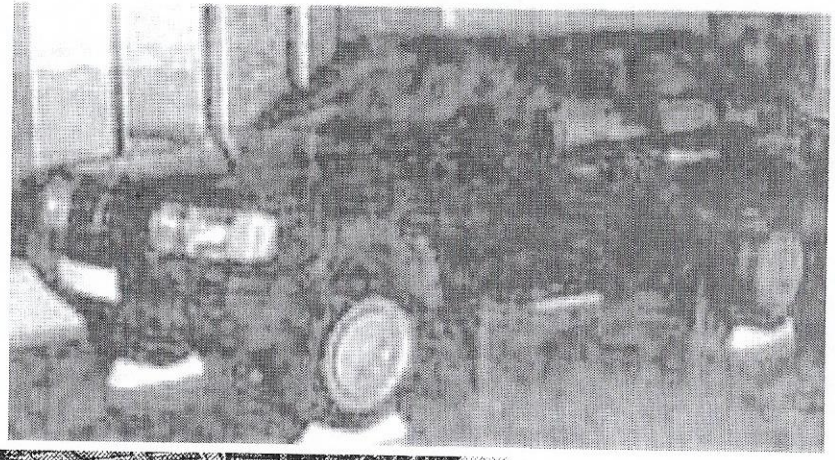
The Paektusan was a greatly simplified copy of the Mercedes-Benz 190.

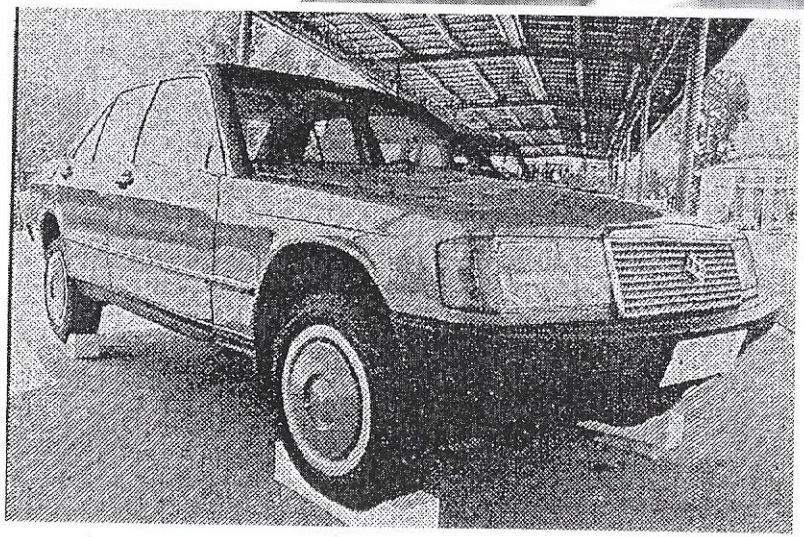
The car was made in the late 1980s.

Paektusan or Paikdusan is also referred to as **Mount Paikdu**, or Baikdu.

The North Koreans knocked down imported cars completely to measure each single part for construction drawings. Reports about terrible overall quality seem to confirm North Korean origin.

According to The Chosun Ilbo: *"the car is a poor replica, with the doors not shutting properly due to unmatched window sections"*





PYONGYANG 4.10

The Pyongyang 4.10, made in 1987, was another Mercedes W201 (1982-1994) copy, developed by the North Koreans and equipped with a Mercedes Benz engine.
The car was named 4.10 as Kim Il Song had declared on April 10th that when South Korea was producing cars, North Korea could do the same.
The prototype run until 1993. Mass production never started.

Photos of the Pyongyang 4.10 are taken in Pyongyang, March 19 1989, by Eckart Dege and Meinrad Frhr. von Ow.

OTHER CARS AND TRUCKS

Other vehicles named in articles in the press:

Chachzu (Jaju) five-seat car

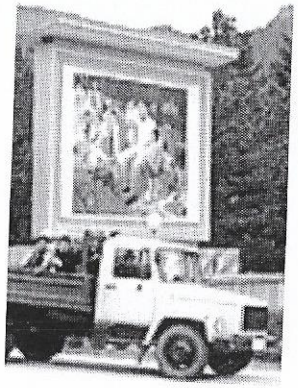
Construction (Konsor) van or passenger car

Sintaepaek (Shintaibak) truck 7 ton

Fight (Tujaeng) truck 1973

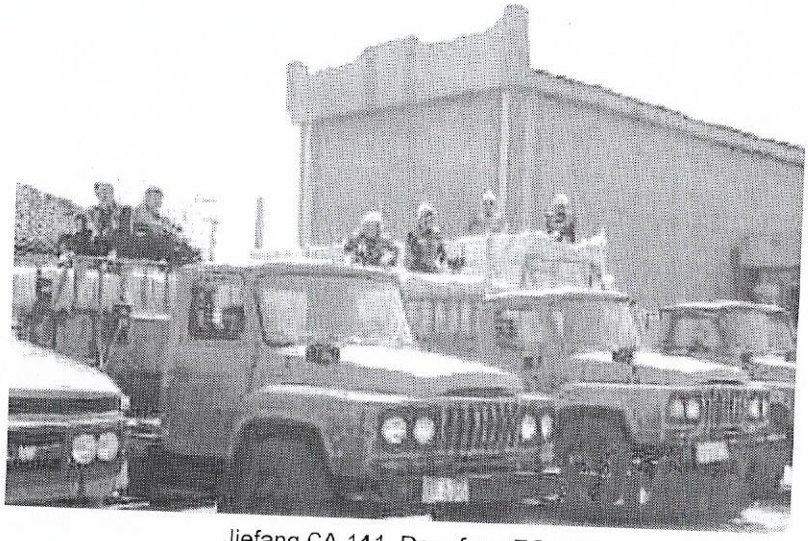
Samjiyon car.

TRUCKS OF RUSSIAN AND CHINESE ORIGIN

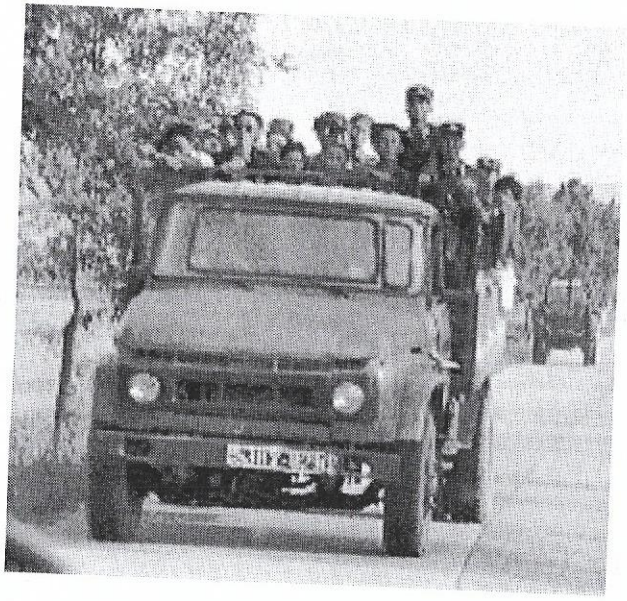


GAZ 6008

Left
and right



Jiefang CA 141, Dongfeng EQ 140s



Jiefang CA 141
Note the front window badly repaired

Dongfeng EQ 140

MINIBUSES

Countryside buses, make unknown.

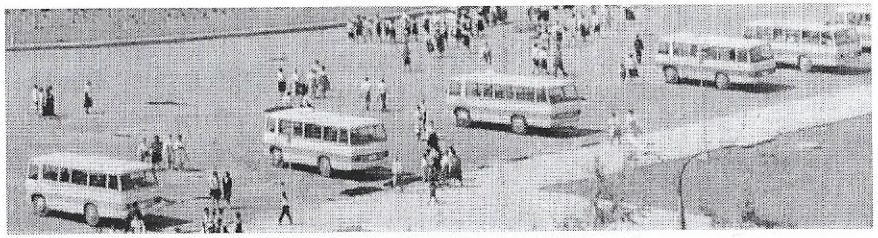
Buses have been operated since the 1970s under a government initiative, in which the North Korean authorities took pride. (..) Small-sized buses with 20-odd seats running countryside roads are always jam-packed with people who visit towns on business or to travel on by railroad. These buses make one or two return trips a day.

A bus crew comprises of a driver, female conductor and assistant. Faced with the petroleum shortages, they began to replace diesel bus engines with charcoal ones in the mid-1980s. Assistants burn charcoal in fuel tanks attached behind buses. Powered by inadequate energy generated from charcoal, the buses travel slowly, at about 20km per hour.

Running on unpaved countryside roads, the buses often suffer punctured tires. North Korea has a total of 23,400 km of roads, of which no more than 10% are paved. Furthermore, the buses always carry excessive loads. Bus passengers, who make infrequent visits to towns, each carry three or four bags of luggage, the total of which occupies more space than passengers. Unless they are quite skilful in motor-vehicle repair, in addition to patching up malfunctioning tires, bus drivers are very liable to encounter embarrassing situations. Though they have to put up with the stinking smell of charcoal gas and overcrowding, few passengers complain about bus travel, because it is so rare.

Neither intercity buses linking cities and counties nor express buses exist in North Korea. The railroad is the sole means of public transportation available for long-distance trips. To get to railroad stations, however, one has to travel by bus. Such routes quite often extend up to 40 km. This being the case, fierce competition takes place to obtain bus tickets. It's difficult to buy tickets even if you visit bus stations early in the morning. When buses are expected, most of the bus seats have already been occupied, learning of which prospective passengers get frustrated and wrangles develop frequently.

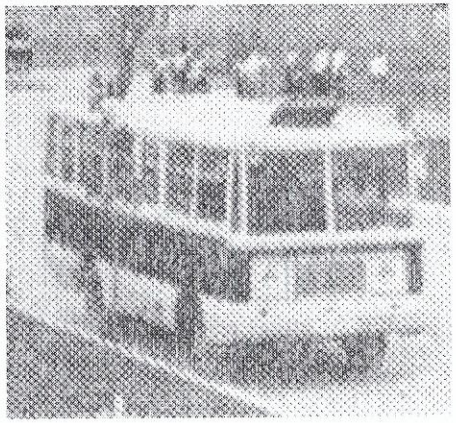
Senior county bureaucrats and people of power in the police and security agencies secure several tickets on the strength of their authority, and the driver and conductor pre-emptively



make room. This is why the jobs of drivers and conductors, tiring as they are, are popular in North Korea. Whereas a ticket of a state-operated bus costs around only NKW1.50, bribing the driver for a ticket costs a sum sufficient for purchasing a package of foreign cigarettes, an amount worth 20 to 30 times the official price.

Autonomous buses with conductors eliminated were introduced in the capital, prior to the Pyongyang Festival in 1989. The operation of these is said to be not so successful, because no small numbers of passengers take free rides under one excuse or another.

Fuel shortages have gotten worse in recent years. As a consequence, countryside buses, the sole means of public transportation in remote rural areas, though sometimes serving only once a day, have long since disappeared, according to North Korean defectors in the South.
(Nk.chosun.com, Kim Miyoung, July 2nd 2002.)



THE PYONGHWA AUTO WORKS.

The completion in April 1999 of the Pyonghwa (**"Peace"**) Auto Works in Nampo, South Pyongan Province, in an inter-Korean venture, brightened the prospects for the North Korean automobile industry.

The South Korean partner is no one else but the reverend Sun Myung Moon, the thumpingly anti-communist reverend of the "Unification Church", who invested $ 55.- million dollar.
From North Korean side it is the state-owned Ryonbong company. The unlikely relationship between the Unification Church and North Korea dates to 1991, when Moon (born 1920) visited Kim Il Sung (1912-1994), see photo.

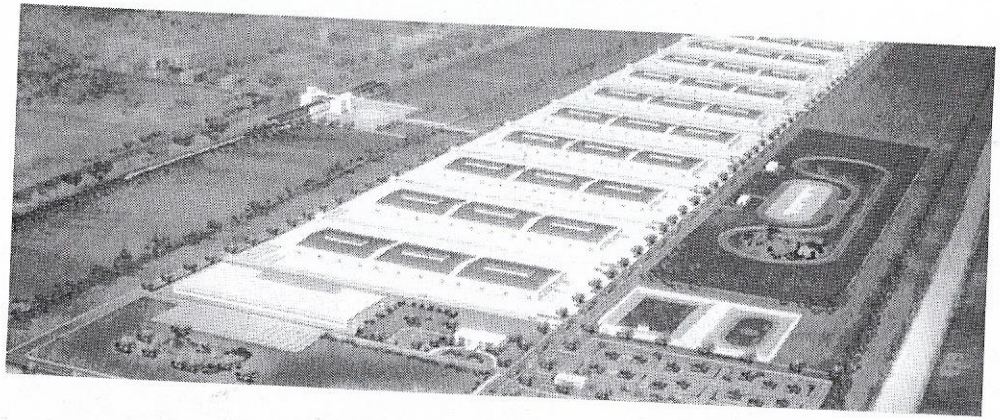
Pyeonghwa Motors (Seoul), owned by reverend Moon's Unification Church, is a 70% stockholder of the company. The other 30% is owned by the Ryonbong General Corp.

The assembly plant was opened in April 2002 when the first line was completed and the first Hwiparam (Fiat Siena) was produced.

From 2002- 2004 about 2000 cars are said to have been built, but travellers never saw one. For 2005 the company had set up a production goal of 1000 cars.
Since 2005 some Pyonghwa Hwiparam cars have been seen in Pyongyang.

Production capacity is 20.000 cars per year. There are 200 workers.

Since 2004 the factory started to assemble Chinese pickups and SUVs.



In 2002, skd-production (semi-knocked down) took place.

In 2003 ckd (complete knocked down) production started.

Skd production, 2002.

July 13, 2004:

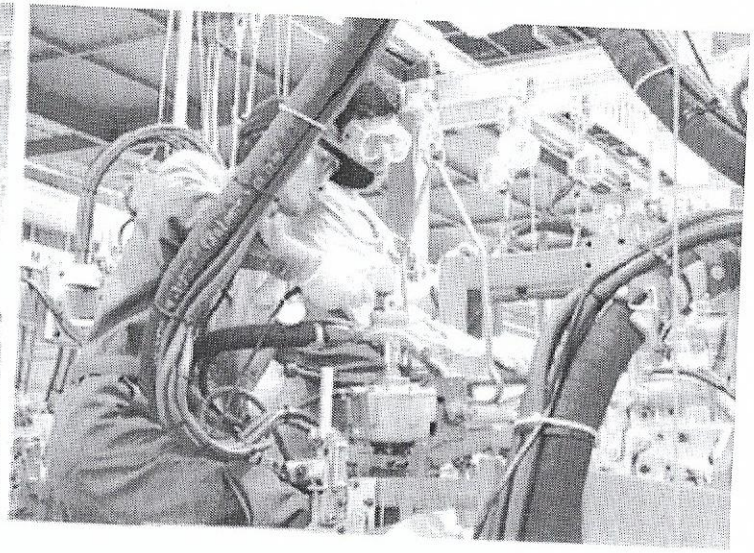
Pyonghwa, which means 'peace', has decided to end its technical partnership with Fiat and rely on its own R&D. This may not be such a wise move as, so far, the company's two models are based on Fiat designs, though the move is not unexpected as the reclusive North Korean government has a disastrous track record working with foreign companies.

Pyonghwa's Hwiparam (Whistle) model is based on the Fiat Siena and its Ppeokkugi (Cuckoo) model on the Fiat Doblo. Fiat remains silent on the issue.

Pyonghwa still maintains officially that it has big expansion plans: though an artist's rendition of the company's planned expanded production facility in the port of Nampo may remain just that given the lack of available capital in the country.

Now Pyonghwa is aiming to buy in new production lines from China. More advertisements for the company have appeared around the usually ad-free country, through sales appear not have progressed very much from the official figure of 341 units last year.

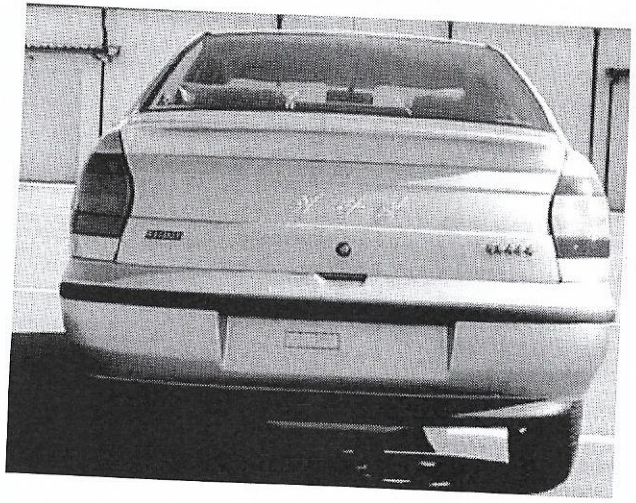
Paul French, Access Asia, July 13, 2004.



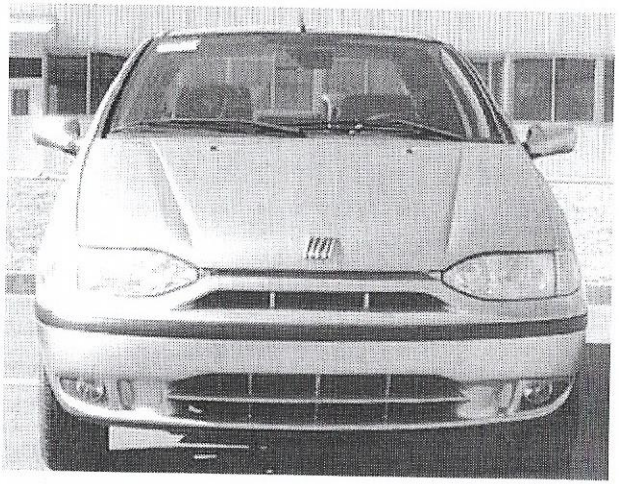
HWIPARAM

The first product was the Hwiparam, which means **"Whistle".** Fiat Siena kits were imported via Viet Nam (Mekong Motors) and ckd assembled in Nampo.

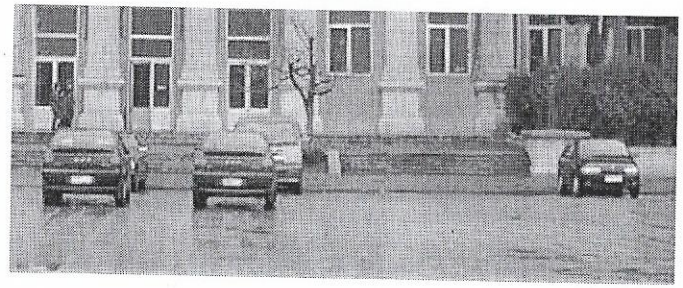
Hwiparam	Sedan 1.5	Sedan 1.3
Seats	five	five
Kerb weight	1095 kg	990 kg
Loaded weight	1520 kg	1450 kg
Length	4100 mm	4100 mm
Width	1626 mm	1626 mm
Height	1445 mm	1445 mm
Wheelbase	2360 mm	2360 mm
Engine	Four cylinder	Four cylinder
Capacity	1580 cc (HL)	1242 cc (ED)
Horse power	100 hp/ 5500 rpm	74 hp/ 5000 rpm
Maximum torque	140 kgm/ 4400 rpm	104 kgm/ 3250 rpm
Gearbox	Five speed manual	Five speed manual
Fuel tank	48 L	48 L
Tyres	175/ 65 R 14	175/ 65 R 13



First Hwiparam, April 2002.



Some Hwiparams in Pyongyang



"Hwipharam"

Hwipharam is perfectly designed for driver safety, convenience and ultracomfort.

Front suspension: Macpherson independent with transverse lower wishbones coil spring and anti roll bar.

Rear suspension: Semi-independent wheels, coil spring and anti roll bar.

Brakes: front ventilated disks, rear drums.

HWIPARAM ON BILLBOARDS

The first poster ad in North Korea.

The first advertising poster in North Korea appears on the streets. The huge poster erected at the end of a flyover in Pyongyang features an automobile and a slogan saying: "To the new world, uniting the peoples' powers.!"

Slightly below that there is a logotype, a stylized picture of two flying pigeons, and an advertisement text: "Hviparam, a peaceful car".

Hviparam ("wind whistling") brand cars are produced in North Korea. Annualy, about 10.000 of them sold. An average price for them revolves around US$ 8.000. An ordinary citizen of the country still cannot afford this automobile. Private cars are very rare in Pyongyang streets, so this advertising targets local corporate clients first of all, thinks Itar-Tass.

This first advertisement poster is yet another proof of liberalisation of the economy, which has been happening in the country for a while now. The "peaceful car" appeared in a republic that from the day of its formation has traditionally favoured military power and army support.
Pravda.Ru, January 7, 2004.

The view of the Korean Friendship Association on the Hwiparam billboards:

New advertisements of the "Fiparam" car in Pyongyang

Around a year ago, Pyongyang began erecting billboards advertising a car called 'Fiparam' (whistle), which is produced by a Pyonghwa Motors joint-venture.
Some tourists and visitors rushed to say this demonstrated that a market economy (capitalism) was entering the country and that advertisements were appearing everywhere. Immediately, the press echoed this information.

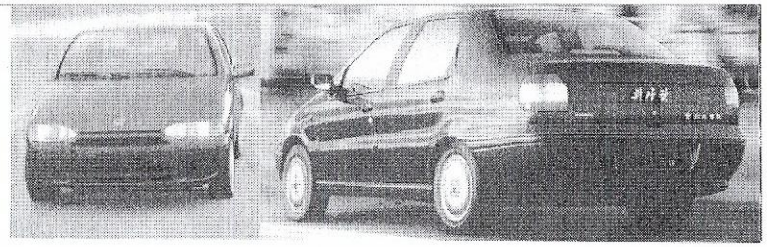
Unbeknownst to the foreigners, however, the Fiparam represents something quite common to the North Korean ethos since the nation's inception.
National pride is evoked by the Fiparam because the car is the product of cooperation between North and South Korea and, thus, a symbol of reconciliation.
When a locomotive or other industrial achievement is created, it becomes an

object of admiration and a symbol of progress in the country, not a landmark for shopping or class distinction. This is the reality reflected in the billboards.

Incidentally, even if a DPRK citizen managed somehow to have enough money to buy the car, the DPRK prohibits individuals to acquire private vehicles. Indeed, a businessman would find it completely absurd to advertise something that cannot be sold! But absurd are those who think an advertisement can only reflect sales purposes.

Alejandro Cao de Benos de Les y Perez, Special Delegate –DPRK Government, President of the Korean Friendship Association (KFA), Delegate Counselor of the National Democratic Front of South Korea (NDFSK), in Lodestar, August 2004.

Hwiparam brochure in Korean and English.

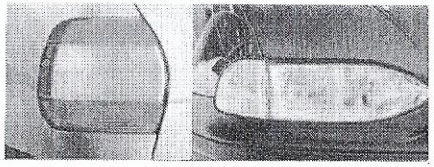


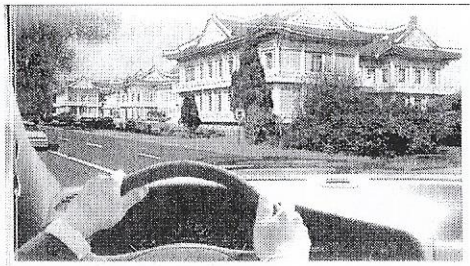
강하고 아름다운
《회파람》.

누구나 첫 눈에 호감을 가지게 되는 《회파람》.
《회파람》은 강하고 아름다운 승용차로서 당신들의 사랑을 받게 될것입니다.

HWEEPAARAM,
beautiful yet rugged

Anybody who sees it would be brought to like it immediately. Being graceful yet strong, it will enjoy your never-fading love.



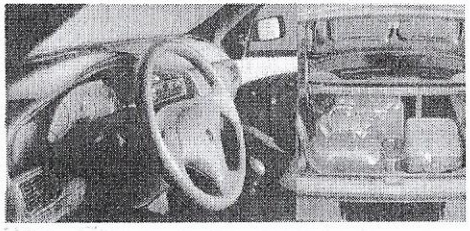


부드러움과 친근감을 주는 《희파람》

《희파람》은 언제나 편안하고 아늑하며 단란하고 행복한 분위기를 느끼게 할것입니다.

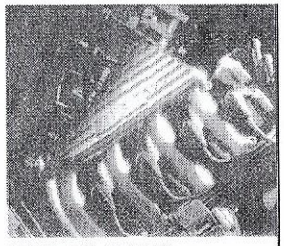
HWEEPAARAM, ever tender and kind

Whatever time you are on it, you shall never fail to feel comfortable and relaxed, gracious and happy.



선진기술에 토대한 안전한 《희파람》

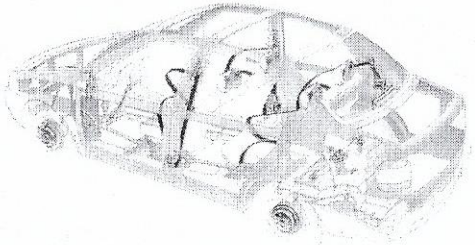
《희파람》은 최고의 선진기술을 토대로 생산된 안전한 승용차입니다.
의심할바없이 《희파람》은 당신의 모든 안전한 여행상 편의를 최대한 도모하게 될것입니다.



희망4기통, 쌍간치, 16밸 가변흡기식
Peerrl engine, twin cam, 16 valves, m.p.i

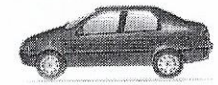
HWEEPAARAM, Safe with Hi-Tech.

Based on most advanced technologies, it will keep you ever safe.
No doubt, you'll be provided with all conveniences together with safety.

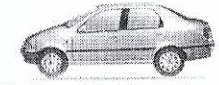


《희파람》은 엄격한 국제규격의 안전상 요구에 준하고 있습니다.
HWEEPAARAM pass the stringent safety requirements of the strict internation standards.

유리색 · Schale silver

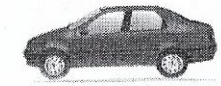


감청색 · Deep blue



사금색 · Charcoal beige

암녹색 · Grand green



홍색 · Red

기술제원표

형	HD	ED
전장 · 폭 · 고	4,000 · 1,665 · 1,440	4,000 · 1,665 · 1,440
축거	2,360	2,360
윤거 전/후	1,430 / 1,430	1,430 / 1,430
최저지상고	160	160
차량중량	1,010 kg	1,030 kg
승차정원	5명	5명
엔진형식	수냉 직4	수냉 직4
배기량	1,342 cc	1,342 cc
최고출력	80 ps / 6,000 rpm	80 ps / 6,000 rpm
최대토크	11.5 kg-m / 4,000 rpm	11.5 kg-m / 4,000 rpm
연료장치	전자제어 연료분사식	전자제어 연료분사식
연료탱크 용량	55 L	55 L
변속기	5단 수동	4단 자동
조향장치	랙 피니언	랙 피니언
제동장치	전 · 후 디스크	전 · 후 디스크
현가장치	맥퍼슨 스트럿	맥퍼슨 스트럿
타이어	175/70 R13	175/70 R13
안전장치	운전석 · 조수석 에어백, ABS	운전석 · 조수석 에어백, ABS
편의장치	파워윈도우, 틸트 스티어링 휠, 중앙집중 도어록	파워윈도우, 틸트 스티어링 휠, 중앙집중 도어록
외장색	유리색, 감청색, 사금색, 암녹색, 홍색	유리색, 감청색, 사금색, 암녹색, 홍색
내장색	회색	회색

SPECIFICATIONS

Model	HD	ED
DIMENSION & WEIGHT		
Overall length · width · height	4,000 · 1,665 · 1,440 mm	4,000 · 1,665 · 1,440 mm
Wheelbase	2,360 mm	2,360 mm
Tread front / rear	1,430 / 1,430 mm	1,430 / 1,430 mm
Ground clearance	160 mm	160 mm
Curb weight	1,010 kg	1,030 kg
Seating capacity	5 persons	5 persons
ENGINE		
Type	Water cooled, 4 cycle, inline 4 cylinder, OHC	Water cooled, 4 cycle, inline 4 cylinder, OHC
Displacement	1,342 cc	1,342 cc
Max. power	80 ps / 6,000 rpm	80 ps / 6,000 rpm
Max. torque	11.5 kg-m / 4,000 rpm	11.5 kg-m / 4,000 rpm
Fuel system	Electronic fuel injection	Electronic fuel injection
Fuel tank capacity	55 L	55 L
TRANSMISSION & RATIO		
Type	5 speed manual	4 speed automatic
Gear ratio	1st 3.727 / 2nd 2.045 / 3rd 1.357 / 4th 1.000 / 5th 0.861 / Rev 3.545	1st 2.842 / 2nd 1.568 / 3rd 1.000 / 4th 0.694 / Rev 2.393
Final reduction	4.235	4.235
CHASSIS & BODY		
Steering system	Rack & pinion	Rack & pinion
Suspension	Front: MacPherson strut, coil spring, stabilizer bar Rear: independent, trailing arm, coil spring, stabilizer bar	Front: MacPherson strut, coil spring, stabilizer bar Rear: independent, trailing arm, coil spring, stabilizer bar
Brake system	Front: ventilated disc Rear: disc	Front: ventilated disc Rear: disc
Tire size	175/70 R13	175/70 R13
Wheel rim	5J	5J
Body construction	Unitized	Unitized
Body color	Silver, Charcoal beige, Deep blue, Grand green, Red	Silver, Charcoal beige, Deep blue, Grand green, Red
INTERIOR		
Seat material	Cloth	Cloth
Seat color	Gray	Gray
Safety system	Driver & passenger airbag, ABS	Driver & passenger airbag, ABS
Convenience	Power window, tilt steering wheel, central door lock	Power window, tilt steering wheel, central door lock

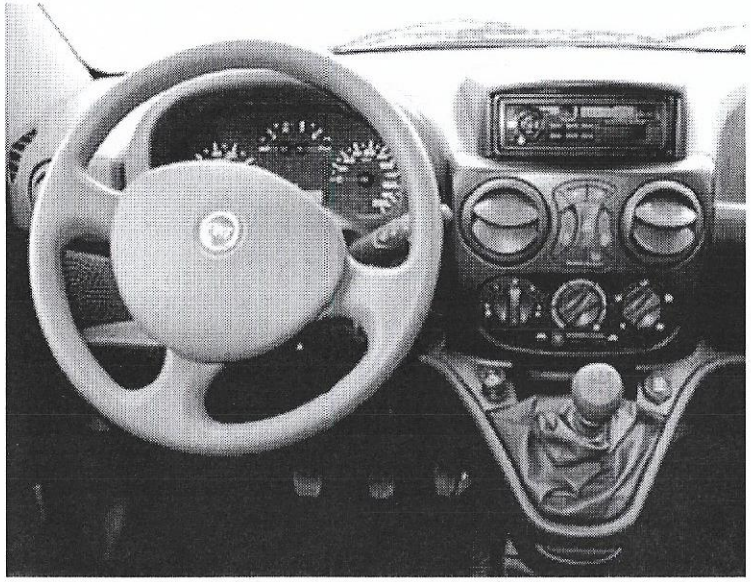
PEACE MOTORS CORPORATION(P.M.C)

PPEOKKUGI 1

Ppeokkugi means **"Cuckoo"**. The Ppeokkugi 1 was the ckd assembled Fiat Doblo.

Ppeokkugi 1	MPV
Kerb weight	1320 kg
Length	4159 mm
Width	1724 mm
Height	1814 mm
Wheelbase	2566 mm
Engine	Four cylinder
Capacity	1596 cc

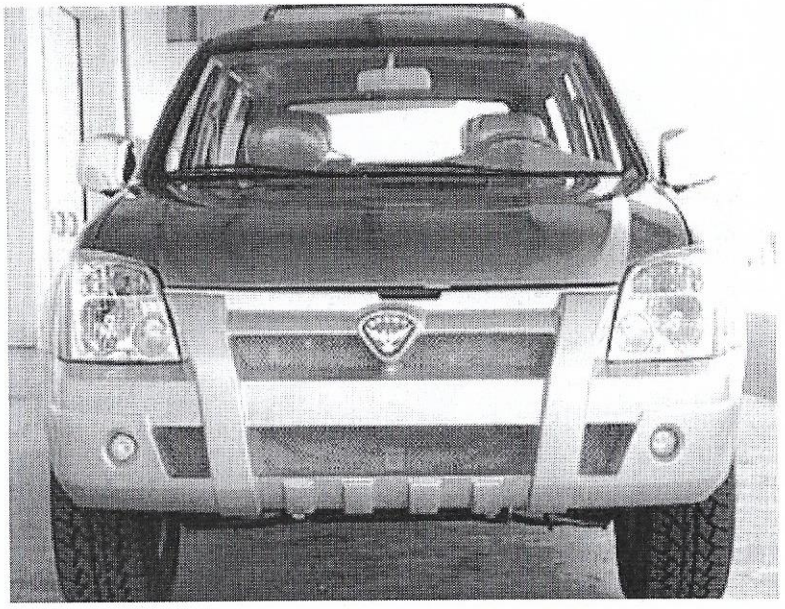
Introduction of the Ppeokkugi 1, at the Sixth Pyongyang International Commodity Fair, August 11, 2003.



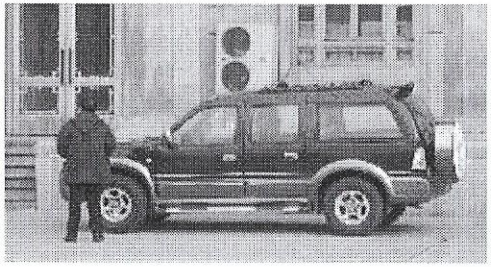
PPEOKKUGI 2 (PREMIO)

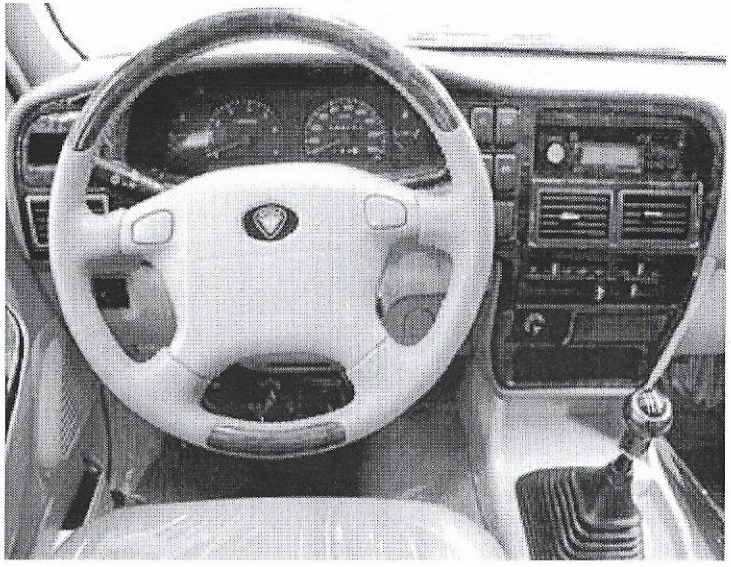
In 2004, Pyonghwa Motors started the assembly of the Chinese Shuguan SUV and pickup, hoping to make more money than it got from the production of the Hwiparam.

Ppeokkugi 2	SUV
Seats	Five-seven
Kerb weight	1605 kg
Total weight	2285 kg
Length	5065 mm
Width	1770 mm
Height	1880 mm
Wheelbase	3025 mm
Fuel capacity	50 L
Tyre size	235/ 75 R 15
Engine	Four cylinder
Capacity	2237 cc
Horse power	103 hp/ 4600 rpm
Maximum speed	145 km/h
Gearbox	Five speed manual

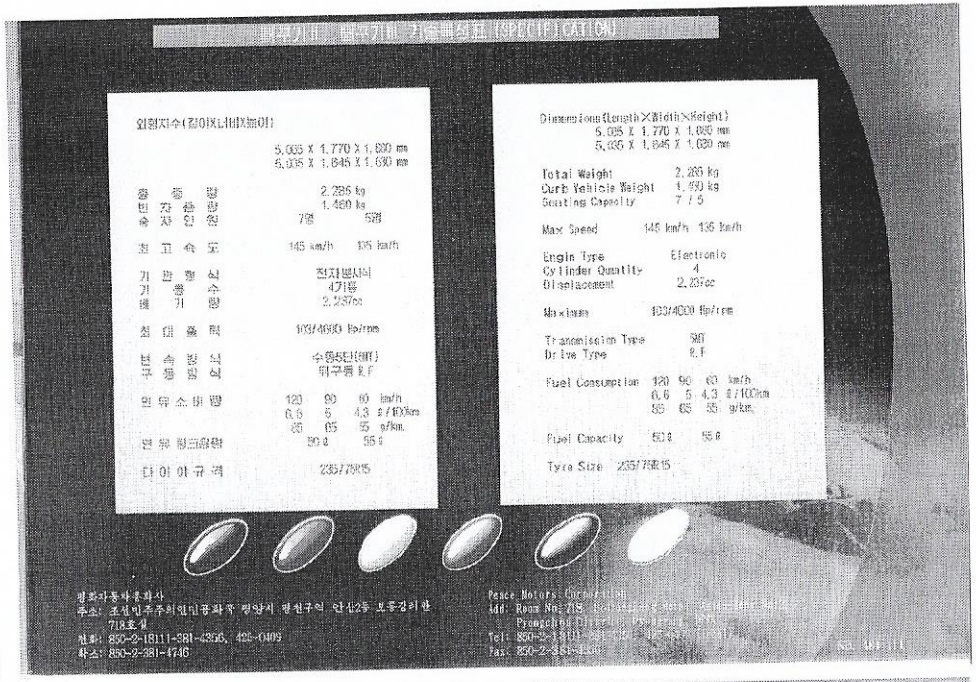


Axle maker Dandong Shuguang from China started producing CKD´s for Pyeonghwa. Dandong city is just across the border from North Korea. The SUV and pickups that Dandong Shuguang supply to Pyeonghwa are actually produced by Fudi down in Nanhai then fitted with a distinct nose section up north in Dandong.





Ppeokkugi II brochure in Korean.



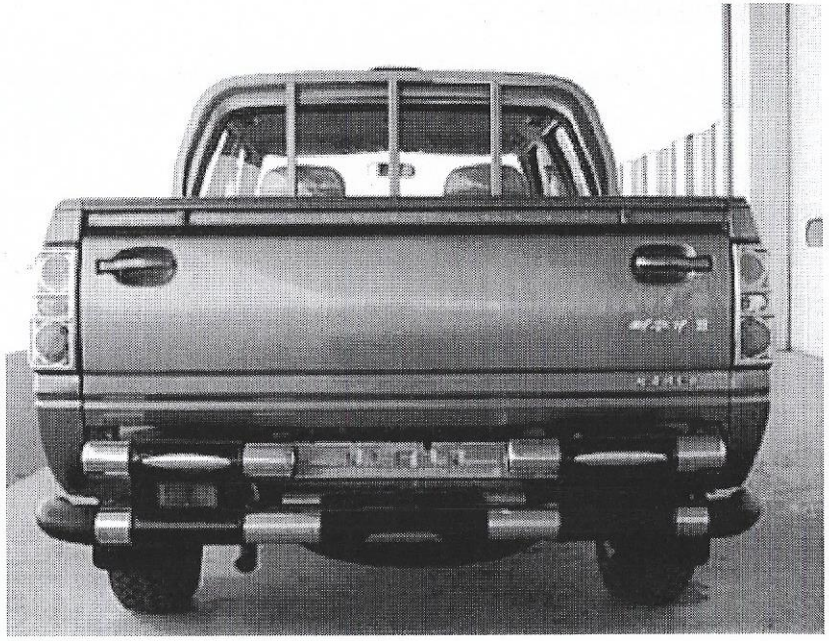
Ian Lee, a visitor, was invited to the Potonggang Hotel in 2004. He went for a test drive and was then offered the cars for the amounts shown below:

Ppeokkugi 1 (Fiat Doblo):	12.900 euro
Hwiparam (Fiat Siena):	10.700 euro
Ppeokkugi 2 (Shuguan 4x2) :	11.900 euro
Ppeokkugi 3 (Shuguan pickup):	9.900 euro

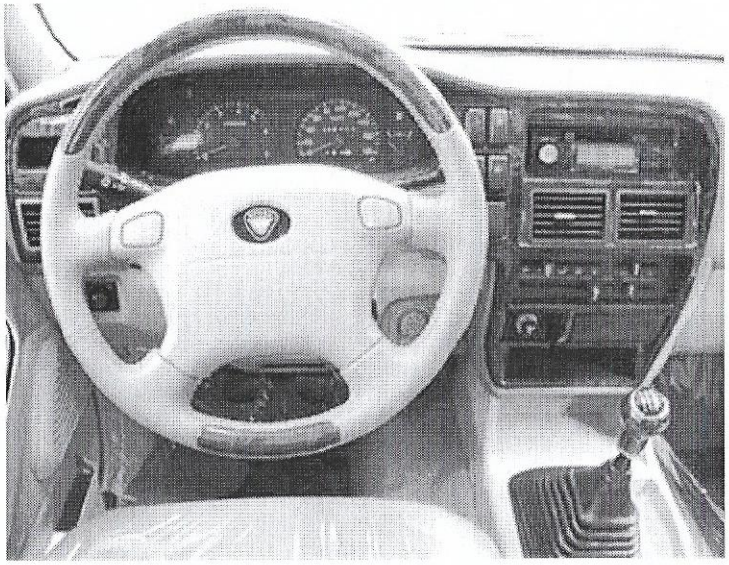
PPEOKKUGI 3

Together with the SUV, a pickup was also assembled. Its launch took place on April 20, 2004.

Ppeokkugi 3	pickup
Seats	Five
Kerb weight	1460 kg
Length	5035 mm
Width	1690 mm
Height	1630 mm
Wheelbase	3025 mm
Engine	Four cylinder
Capacity	2237 cc



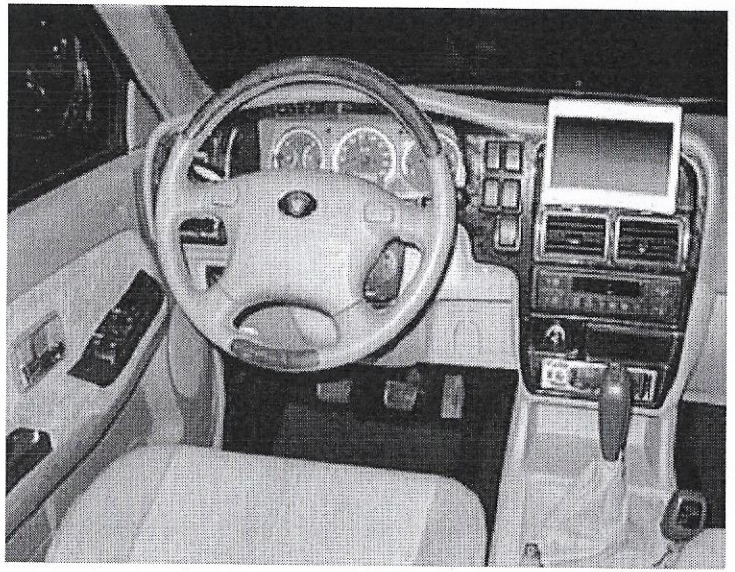
The Ppeokkugu pickup has a Nissan imitation grille.



PPEOKKUGI 4 (PRONTO)

The fourth Cuckoo model was a four-wheel drive SUV, introduced in 2005.

Ppeokkugi 4	Pronto GX 4 x 4	Pronto DX 4 x 2
Seats	Five-seven	
Kerb weight	1750 kg	
Gross weight	2450 kg	2345 kg
Length	5165 mm	5165 mm
Width	1790 mm	1795 mm
Height	1890 mm	1855 mm
Wheelbase	3025 mm	3025 mm
Tyre size	235/ 70 R 15	235/ 75 R 15
Engine make	Shenyang Mitsubishi	Isuzu
Type	4G64S4M petrol	4JB1 diesel
Capacity	2351 cc	2771 cc
Max. output	128 hp/ 5000 rpm	76 hp/ 3800 rpm
Max. torque	190 Nm/ 2500 rpm	174 Nm/ 2000 rpm
Gearbox	Five speed manual	Five speed manual
Max. speed	125 km/h	110 km/h



Front brakes: disc.
Rear brakes: drum.

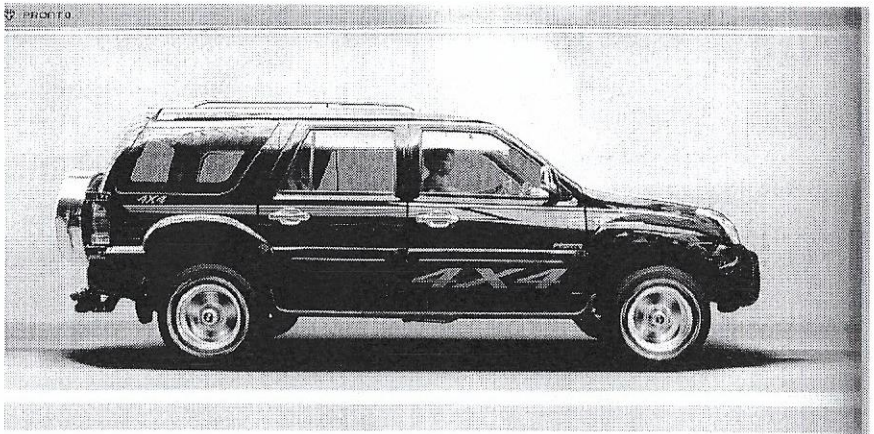
Ppeokkugi 4 (PMC Pronto) brochure in Vietnamese and English:

Lần đầu tiên xuất hiện tại Triển lãm Auto Pano Vietnam 2005, Pronto lập tức chinh phục khách hàng và trở thành chiếc xe được ưa chuộng nhất tại Triển lãm với kiểu dáng dũng mãnh, khoang xe và nội thất rộng rãi, các tiện ích và đồ dùng phục vụ tối đa cá nhân hay gia đình. Các yếu tố kinh tế giá xe và nhiên liệu, cũng giúp Pronto được ưa chuộng như vậy tại Việt Nam.

Pronto - cùng bạn Chinh phục mục tiêu!

Unveiled at the Vietnam Auto Pano Exhibition 2005, Pronto attracted immediate attention of customers and became the most favourite car at the exhibition with its powerful body, roomy interior and highly family-friendly functionality. Economic considerations, price and low fuel consumption also contribute to the success of Pronto in its Vietnam debut.

Pronto - always beside you To win the goal!



Thiết kế/*Design*

Pronto tới từ những thiết kế hiện đại và sinh. tế nhất trong dòng xe đa dụng tại Việt Nam. Chiều dài 4.850mm (4.955mm cho Pronto Diesel - dài nhất so với các xe cùng loại - giúp Pronto vận hành chắc chắn và có vẻ ngoài dũng mãnh. Mặt ter cùng với lưới tản nhiệt được kết cấu khỏe mạnh và độc đáo, mang dáng vẻ sẵn sàng chinh phục địa hình được ưa chuộng nhất trên thế giới.

Modern and stylish design features can be found throughout the New Pronto. The overall lengths of 4,850mm (4,955mm for the Diesel version - the largest among MPVs in Vietnam), promotes balance and steadiness to Pronto. The front with the powerfully built, pleated radiator grill is inspired of world's best-selling SUVs.

Pronto được giới thiệu với hai loại động cơ: Pronto máy xăng với động cơ Mitsubishi 2.4l, 4 xi-lanh thẳng hàng và Pronto máy dầu với động cơ Isuzu 2.8l Diesel. Động cơ của hai nhà sản xuất hàng đầu thế giới giúp bạn yên tâm hoàn toàn về khả năng vận hành hoàn hảo và thân thiện với môi trường của Pronto.

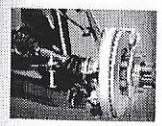
New Pronto is equipped with Mitsubishi 2.4l, 4 in-line cylinder gasoline and Isuzu 2.8l diesel engine respectively which provide flexibility and surging power. Low and cleaner emission is also a Pronto's environment-friendly feature.

Pronto máy xăng được trang bị hệ thống vận hành 2 cầu chủ động. Cần gạt cầu được bố trí thuận tiện cho người lái.

Gasoline-powered Pronto is available in 4x4 with the all-wheel shifter positioned conveniently to the driver.

Hệ thống lái được trợ lực giúp người lái có thể vận hành xe nhẹ nhàng nhất.

Power steering wheel creates maximum comfort in maneuverability.



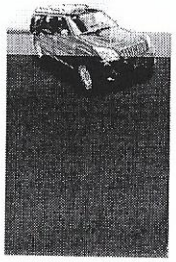
Hệ thống treo trước vận hành độc lập với tay treo đôi, thanh xoắn và thanh ổn định. Hệ thống treo sau với trục dầm và lá nhíp bán elip giảm chấn giúp Pronto vận hành thật êm, đồng thời tăng khả năng chịu tải.

The front suspension is independent with double wishbone and upper torsion, stable bar. The dependent rear suspension with vertical and plate springs ensures a smoother drive and allows larger cargo.

PRONTO

KIỂU DÁNG HIỆN ĐẠI

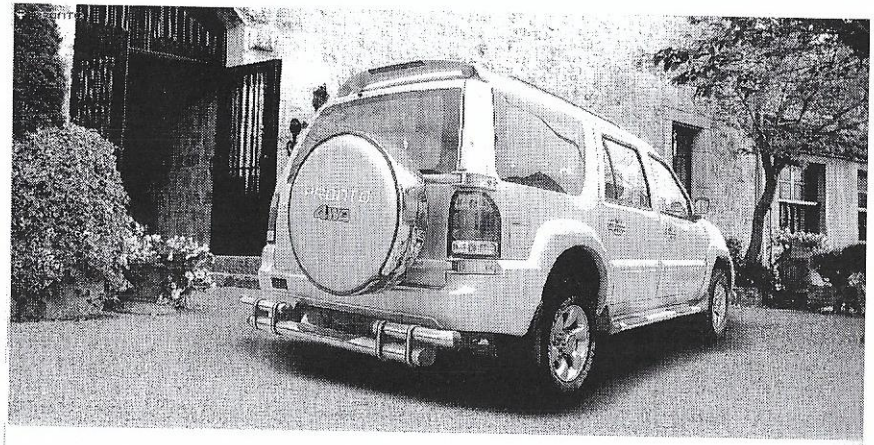
ELEGANT DESIGN



Nội thất/*Interior*

Với 3 hàng ghế ngồi rộng rãi, Pronto đem lại cho bạn, người thân và gia đình bạn không gian rộng nhất trong các dòng xe cùng loại. Các tiện nghi trong xe giúp bạn có những giây phút thư giãn khi lái xe và khi nghỉ ngơi.

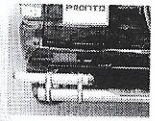
The most roomy interior space among MPVs in Vietnam can be found in the New Pronto with 3 seat rows. Broad functions provide maximum comfort while driving and relaxing.

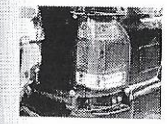


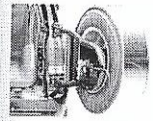
Các chi tiết bên ngoài/*Exterior*

Không chỉ có vẻ ngoài bề thế, từng chi tiết nhỏ của Pronto cũng được thiết kế đầy sang trọng và tiện lợi cho việc sử dụng. Đèn pha và đèn hậu hội tụ những nét tiên tiến nhất của các thiết kế hiện đại. Cùng với đèn pha, đèn sương mù giúp bạn cảm thấy yên tâm trong mọi điều kiện thời tiết.

The New Pronto stands out not only for its powerful body but also for its magnificent exterior in every details. Front lamps and rear combination lamps are applied with newest design trend. Fog lamps can be used in unfavorable weather conditions.







Nẹp hông, tay nắm cửa ở trong và ngoài được thiết kế trang trọng nhất với mạ chrom.
Cản sau sáng được mạ chrom làm tăng vẻ sang đẳng của Pronto.

The side protection moulding, exterior and interior door handle are plated with chrome for an elegant look. The rear bumper is also chrome plated, giving Pronto a strong and safe appearance.

Đèn hậu được thiết kế nổi trang nhã và gọn gàng, thao tác thiết kế hiện đại nhất.

The combination rear lamps stand out for its elegant design.

Lốp dự phòng được bố trí độc lập với cửa sau.

Reserve tyre is positioned independently to the rear door.

Bánh xe lớn giúp Pronto vận hành thật êm trong mọi điều kiện đường. Mâm thiết kế hợp kim nổi bật vẻ sang trọng của Pronto.

The big wheels ensure a smoother drive on any road conditions. Wish alloy wheels, Pronto stands out for a dynamic appearance.

PRONTO

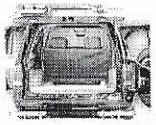
VẺ NGOÀI QUYẾN RŨ

PRONTO

Hãy chuẩn bị cho những chuyến dã ngoại với gia đình và người thân bạn. Pronto là người đồng hành lý tưởng.

7 người trên một chiếc xe. Pronto luôn sẵn sàng. Bạn có thể gập hàng ghế sau cùng lên để có thêm chỗ cho hành lý trong các chuyến đi ngoạn và công tác.

The New Pronto is prepared to take up to 7 persons on the journey. In case you need more space for your luggage, the back seat row can be folded.

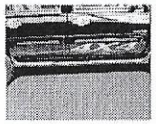


Giá chở hàng được thiết kế gọn mắt, giúp bạn có thể chở thêm các vật dụng dài và cồng kềnh.

Roof bars are built for more space for luggage.

Bậc lên xuống giúp tất cả, mọi người, đặc biệt là trẻ em và phụ nữ lên xuống xe thật an toàn.

The side steps provide safety and comfort to passengers, in particular women and children.



Hãy lựa chọn màu xe bạn yêu thích: đen, ghi bạc và xanh thường đậm.

The New Pronto is available in 3 colors: black, silver and dark blue.

MEKONG AUTO www.mekongauto.com.vn

PRONTO

Thông số kỹ thật

Động cơ, truyền động, nhiên liệu	Pronto - GX	Pronto - SX
Động cơ	Mitsubishi MPI 4G64-SOHC	4G64 - 4 S1
Dung tích xilanh (cc)	2.351	2.351
Công suất cực đại (mã lực)	135/5.000	135/5.000
Tốc độ tối đa (km/h)	170	170
Độ tiêu thụ nhiên liệu (lít/100km)	11/17.000	11/17.000
Hộp số	Số sàn 5 cấp	Tự động 4 cấp
Kiểu động cơ	4 xilanh thẳng hàng, 16 van, DOHC, phun xăng điện tử	4 xilanh thẳng hàng, 16 van, DOHC, phun xăng điện tử
Hệ thống lái	Trợ lực lái	Trợ lực lái
Kiểu vỏ xe	5 cửa, 7 chỗ	5 cửa, 7 chỗ
Lốp xe	225/70R15	225/70R15

Kích thước, trọng lượng		
Trọng lượng không tải (kg)	2.150	2.145
Chiều dài cơ sở (mm)	2.765	2.765
Chiều rộng tổng thể (mm)	1.760	1.760
Chiều cao tổng thể (mm)	1.690	1.690
Chiều dài cơ sở (mm)	3.050	3.050

Khung gầm		
Hệ thống treo trước	Độc lập với tay đòn kép, thanh cân bằng và ống giảm chấn	
Hệ thống treo sau	Phụ thuộc, lò xo cuộn và ống giảm chấn	
Hệ thống phanh trước	Đĩa	
Hệ thống phanh sau	Tang trống	
Trang bị bánh xe và lốp xe	Mâm đúc	Mâm đúc
Thông số lốp xe	225/70R15	225/70R15

Trang thiết bị chính		
Túi khí lái (a)	Có	Có
Túi khí 2 bên (a)	Có	Có
Túi khí đầu gối người lái (a)	Có	Có
Khóa cửa trung tâm	Có	Có
Cửa sổ chỉnh điện	Có	Có
Gương chiếu hậu chỉnh điện	Có	Có
Chìa khóa mã hóa	Có	Có
Hệ thống chống trộm	Có	Có
Hệ thống âm thanh	Có	Có
Đầu đĩa CD	Có	Có
Điều hòa nhiệt độ	Có	Có
Cửa sổ trời	Có	Có
Cảm biến lùi	Có	Có
Cảm biến ánh sáng và mưa tự động	Có	Có
Đèn sương mù	Có	Có
Đèn HID	Có	Có
Đèn báo phanh thứ 3	Có	Có
Đèn báo cửa mở	Có	Có
Đèn báo dây an toàn	Có	Có
Chìa khóa điều khiển từ xa	Có	Có

(a) Được lắp theo tiêu chuẩn của nhà sản xuất ô tô và tùy theo thị trường tiêu thụ.
(b) Công suất động cơ tối đa được đo tại bệ thử động cơ theo tiêu chuẩn SAE J1349.

Mekong Auto www.mekongauto.com.vn

PRONTO

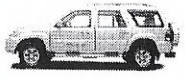
Specification

Engine, Transmission, Fuel	Pronto - GX	Pronto - SX
Engine	Mitsubishi MPI 4G64-SOHC	4G64 - 4 S1
Displacement (cc)	2.351	2.351
Max. power (hp/rpm)	135/5.000	135/5.000
Max. speed (km/h)	170	170
Max. range (km/liter)	11/17.000	11/17.000
Gearbox	5 speed manual	4 speed automatic
Type of engine	4 cylinders in line, 16 valves, DOHC, multi-point fuel injection	4 Cylinders in line, 16 valves, DOHC, multi-point fuel injection
Gear box	5 forward, 1 backward	4 forward, 1 backward
Tyre size	225/70R15	225/70R15

Dimension, Weight		
Gross weight (kg)	2.150	2.145
Overall length (mm)	2.765	2.765
Overall width (mm)	1.760	1.760
Overall height (mm)	1.690	1.690
Wheel base (mm)	3.050	3.050

Chassis and Suspension		
Front suspension	Independent with double wishbone, torsion and shock absorber	
Rear suspension	Dependent, vertical coil and shock absorber	
Front brake	Disc	
Rear brake	Drum	
Tyre size, wheel size	225/70R15	225/70R15

Main Equipment		
Power steering	Yes	Yes
Air conditioning system	Yes	Yes
Driver's airbag and co-driver's airbag	Yes	Yes
Alloy wheels	Yes	Yes
Central door locking	Yes	Yes
Security code	Yes	Yes
Electric mirrors	Yes	Yes
Rear door safety lock	Yes	Yes
Air conditioner	Yes	Yes
Fog lamps	Yes	Yes
Wiper	Yes	Yes
Side steps	Yes	Yes
Roof bar	Yes	Yes
Rear bumper guard	Yes	Yes
Rear spoiler	Yes	Yes



Đại lý *(Your Dealer)*

PRONTO

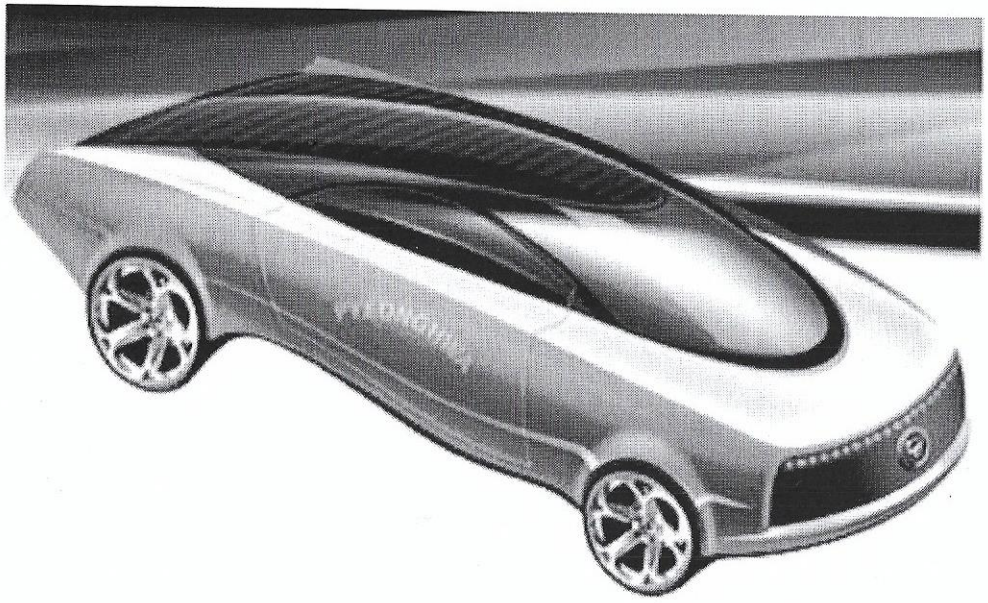
120 Trần Hưng Đạo, Quận 1, TP.HCM
Tel: 08-8387459 - Fax: 08-8367459
Website: www.mekongauto.com.vn
MEKONG AUTO

PYONGHWA MINIBUS

Since 2006 Pyonghwa has a Toyota Hi-Ace based minibus in its programme.

PYONGHWA MOTORS CONCEPT CARS

The Pyonghwa website shows two drawings of concept cars.



ADDRESSES, WEBSITES

Korea Machinery Export Corporation
Central District, Pyongyang, DPRK
Cable address : KIGESUCHUL Pyongyang
(advertisement 1973)

Korea General Machinery Trading Corporation
Tongdaewon District
Pyongyang, DPRK
Tel. 850-2-381-4102
Fax. 850-2-381-4495
Tlx. 36041 KG KP, 5975 MT KP
(internet, 2003)

Korea Foreign Automobile Ryonun Company
Namsin-dong No. 1
Songyo District
Pyongyang, DPRK
Tel. 850-2-381-7975
Fax 850-2-381-4410
Tlx. 5341 ryugun Kp

Peace Motors Corporation (PMC)
Room 718, Pothonggang Hotel
Ansan-dong No. 2
Pyongchon District
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Tel. 850-2-18111-381-4356, 425-0409
Fax. 850-2-381-4746, 850-2-381-4356

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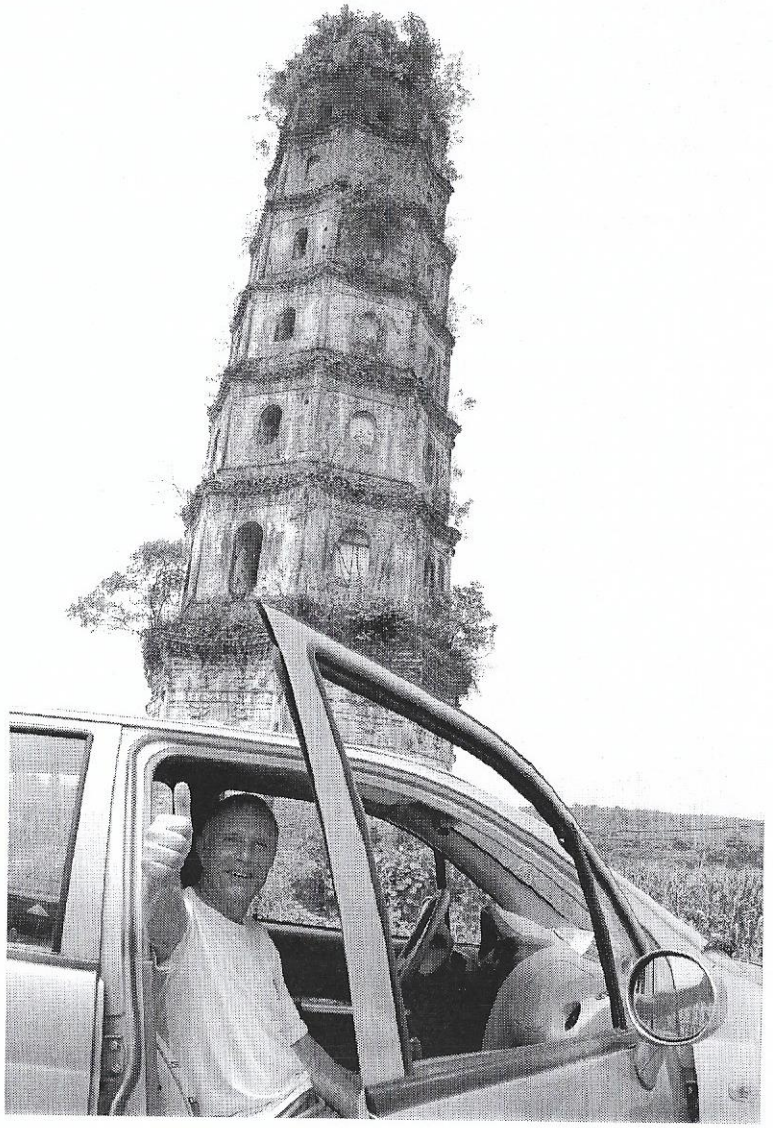
http://www.pyeonghwamotors.com
http://www.mekongauto.com.vn

CHINA MOTOR VEHICLE DOCUMENTATION CENTRE

The centre was established in the Netherlands in 1972. Its aim is to collect all kinds of information on the Chinese automobile industry, present and historical. The centre has a large library of Chinese automobile reference material, and owns a large photo-collection of Chinese cars, collected since 1978 and updated every year since then. The centre publishes several times per year in European car magazines. The centre was the Chinese correspondent of the German yearbook Autokatalog from 1978 till 2001and produced the Chinese entries of the Beaulieu Auto Encyclopediae that was published in 2000. The Society of Automotive Historians has awarded the Beaulieu Auto Encyclopediae with the Cugnot Award. Since 2005 the Centre is contributor of the Katalog der Automobil Revue/ Catalogue de la Revue Automobile. The Centre is a member of the China Hong Kong Red Flag Club and the International Beijing Jeep Owners Club.

Mr. Erik van Ingen Schenau is the director of the centre. He was born in the Netherlands in 1947. Following an early career in social work, he has worked in the tourist industry from 1982 to 2004. In 1966 he began researching automotive developments in the People's Republic of China, travelling extensively in China, and developing his specialism in Chinese automobiles.

From its start, the Centre also had a heavy interest in the automotive industry of North Korea. We are happy to publish here what we have collected in all those years.



CHINA MOTOR VEHICLE DOCUMENTATION CENTRE

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website : http://www.chinesecars.net

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